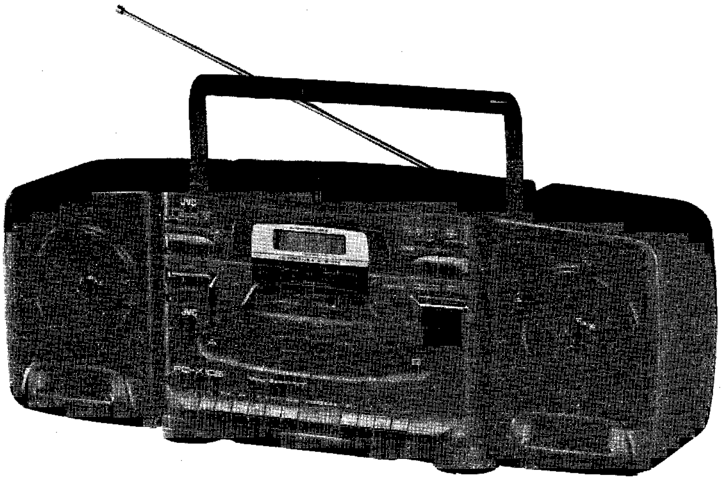
JVC

SERVICE MANUAL

CD PORTABLE SYSTEM

PC – X105 C/J



Area Suffix

C	Canada
J	U.S.A.

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No. 1903

June 1994

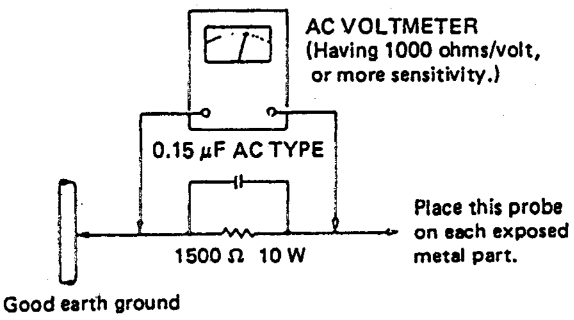
1. Safety Precautions

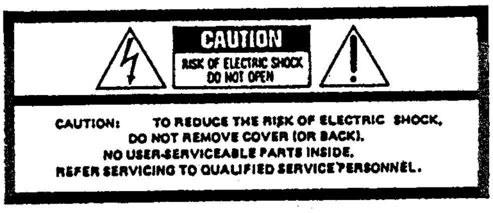
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety — related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by (⚠)on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps , tubings, barriers and the like to be separated from live parts, high temperature parts, mpving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

   After re — assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

   - Plug the AC line cord directly into the AC outlet. using a"Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particulary any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exposeed 0.5mA AC(r.m.s.)
   - Alternate check method

     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15 μ F AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC(r.m.s.).This corresponds to 0.5mA


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 µF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

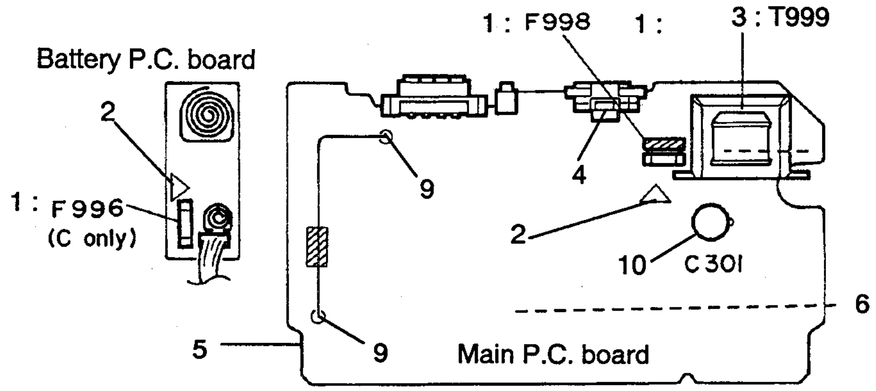
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

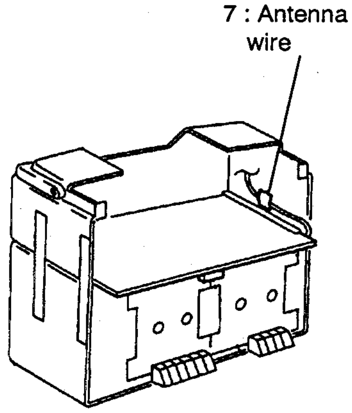
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

2. Safety precaution about PC – X105

■ Important Manageement Points Regarding Safety

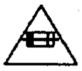




★PC – X105J ONLY

Full Fuse Replacement Marking

Graphic symbol mark (This symbol means fast blow type fuse.)



should be read as follows:

FUSE CAUTION

F998 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 5 – A, 125 – V FUSE

1. Before installation confirm the fuse capacity indication, (UL) and CSA marks on the fuse capacity when installing confirm if the fuse is held tightly with the fuse holder.
2. Concening the fuse caution, letter written in English and French must be confirmed.

★PC – X105 C ONLY

Full Fuse Replacement Marking

Graphic symbol mark (This symbol means fast blow type fuse.)

should be read as follows:

FUSE CAUTION

FOR CONTINUED PROTECTION AGAINST RISK

OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE(S).

F998 : 5A /125V
F996 : 5A/125V

★ PC – X105 C SEULEMENT

Marquage Pour Le Remplacement Complet De Fusible

Le symbole graphique (Ce symbole signifie fusible de type á fusion rapide.)

doit être interprété comme suit:

PRECAUTIONS SUR LES FUSIBLES

POUR ASSURER UNE PROTECTION CONTINUE CONTRELES RISQUES D'INCENDIE, REMPLACEZ UNIQUEMENT PAR UN (DES) FUSIBLE(S) DU MêME TYPE ET DE MêME AMPèRAGE.

F998 : 5A/125V
F996 : 5A/125V

3. •Power transformer marking
   : UL Approved number (71F148HD)/PC – X105J
   : Parts number (FMTP57A2 – 12A) /PC – X110C
   •The torque of the screw driver for the power transformer must be controlled.
4. Concerning the AC socket, the next marking must be confirmed and to avoid printed circuit board pattern damage, the ACsocket must not float from print circuit board.
   Marking ; HSC1566(PC – X105J)
   HSC1466(PC – X105C)

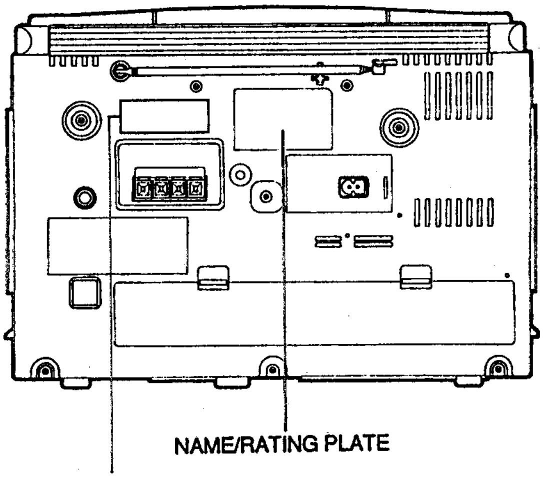
5. Concerning the primary terminal and the adjacent secondary terminal on the printed circuit board to provide proper creeping and spatial distance, solder must not protrude from soldering round.
6. The parts on the pattern side of the print circuit board must be fixed with spacers or bond.
7. Wires must be clamped or secured at the locations shown in the figure so that the wire do not touch to live parts moving part, hot part, or sharp edges.
8. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up the parts in ( )must be controlled.
   D996, D997, D998, D999, (IC101)
9. The single wire on the printed circuit board must be fixded with spacer or bond.
10. Confirm the following parts specified in the UL and CSAreports.
    UL .... C301 Vent type
    CSA .... No confirm

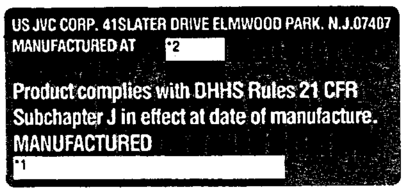
IMPORTANT FOR LASER PRODUCTS
(For U.S.A. only)

PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.
6. **CAUTION:** The laser is able to function, if safety switches out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

IDENTIFICATION LABEL AND CERTIFICATION LABEL




US JVC CORP. 41SLATER DRIVE ELMWOOD PARK. N.J.07407
MANUFACTURED AT *2

Product complies with DHHS Rules 21 CFR Subchapter J in effect at date of manufacture.
MANUFACTURED
*1

Notes:
*1 The date of manufacture.
*2 The ID code of manufacturing plant.

3. Main Features

1. **One-touch operation (COMPU PLAY) (only when AC power is used)**
    - When a source button (CD, tape, or tuner) is pressed, the unit's power is turned on and initiates playback even when the power is set to STANDBY.
2. **Multi-function CD player.**
    - CD player with programmed play of up to 20 tunes/ repeat play function.
    - 8-cm (3-3/16") "CD singles" capability.
3. **Multi-Bass Horn circuit for low-frequency sound reproduction.**
4. **2-Band digital synthesizer tuner with 30-station (15 FM and 15 AM) preset capability**
    - Seek/manual tuning
    - Auto preset tuning
5. **Synchro-record start for CD recording convenience.**
6. **Double-cassette mechanism (Deck A for recording and playback, Deck B for playback).**
    - Metal and CrO₂ tapes can be played back for superior tone quality.
    - Synchro-start dubbing function (normal/high speed dubbing).
    - Relay playback (from Deck B to Deck A).

4. Specifications

Compact disc player section

Type	: Compact disc player
Signal detection system	: Non-contact optical pickup (semiconductor laser)
Number of channels	: 2 channels (stereo)
Frequency response	: 20 Hz – 20,000 Hz
Signal-to-noise ratio	: 76 dB
Wow & flutter	: Less than measurable limit

Radio Section

Frequency range	: FM 87.5 – 108 MHz AM 530 – 1,710 kHz
Antennas	: Telescopic antenna for FM Ferrite core antenna for AM

Tape deck Section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC motor for capstan
Heads	: Deck A; Hard permalloy head for recording/playback, magnetic head for erasure Deck B; Hard permalloy head for playback
Frequency response	: 63 – 12,500 Hz (with normal tape/normal speed)
Wow & flutter	: 0.15% (WRMS)
Fast wind time	: Approx. 120 sec. (C-60 cassette)

General

Power output	: 4.2 watts per channel, min RMS, at 3 ohms from 80 Hz to 15 kHz with no more than 10% total harmonic distortion (PC-X105J) Max. 15.4 W (7.7 W + 7.7 W) at 3 Ω (PC-X105C)
Output terminals	: PHONES x 1 (Output level: 0 – 12 mW/32 Ω, Matching impedance: 16 Ω – 1kΩ) SPEAKER OUTPUT x 2 Matching impedance: 3 Ω–16 Ω
Power supply	: AC 120 V, 60 Hz DC 12 V ("D" cells x 8)
Power consumption	: 28 W (with POWER SW ON) 2.2 W (with POWER SW STANDBY)
Dimensions	: 683 (W) x 252(H) x 233(D) mm (26-7/8" x 10" x 9-3/16") including knobs
Weight	: Approx. 7.5 kg (16.6 lbs) with batteries Approx. 6.7 kg (14.8 lbs) without batteries
Accessories provided	: AC power cord

Speaker Section (each unit)

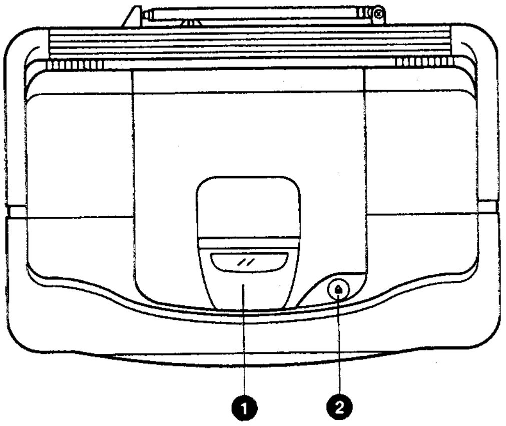
Speakers	: 10 cm (3-15/16") x 1
Impedance	: 3 Ω
Dimensions	: 170 (W) x 235 (H) x 202 (D) mm (6-3/4" x 9-5/16" x 8")
Weight	: Approx. 1.3 kg (2.9 lbs)

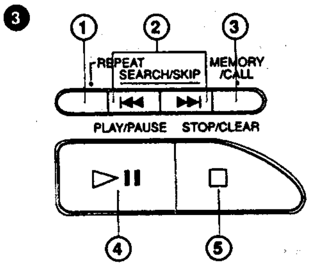
Design and specifications are subject to change without notice.

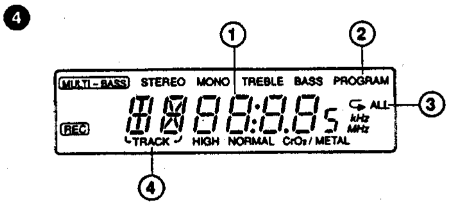
5. Instructions (Extract)

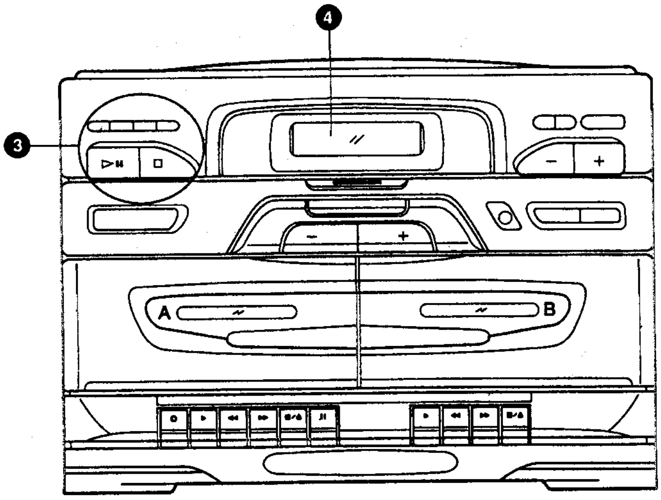
NAMES OF PARTS AND THEIR FUNCTIONS

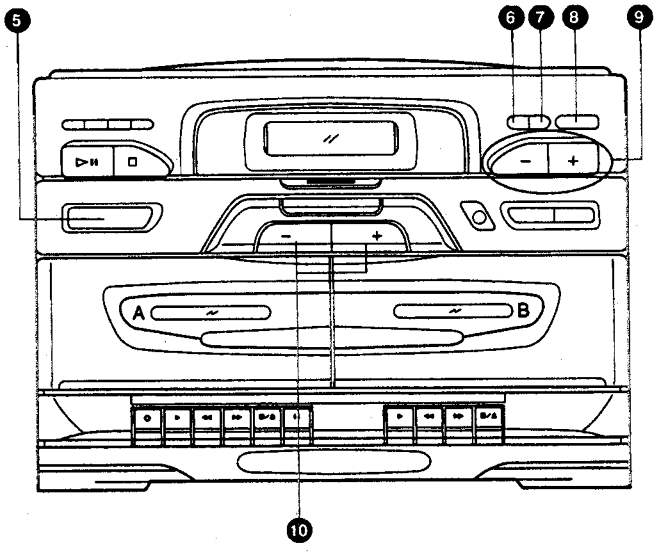
- **Top and front panels**





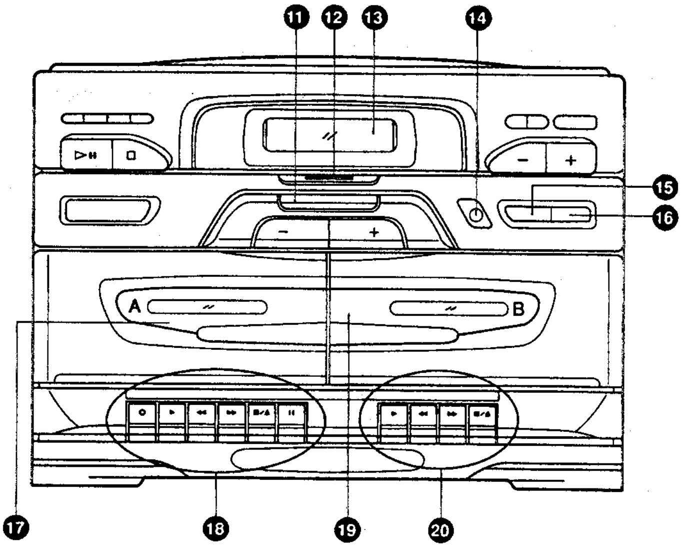






❶ **Disc holder**
❷ **Disc holder open button (⏏)**
❸ **CD operation buttons**
  ① REPEAT button
  ② SEARCH/SKIP (⏮/⏭) buttons
  ③ MEMORY/CALL button
  ④ PLAY/PAUSE (▷II) button
  ⑤ STOP/CLEAR (□) button
❹ **Display window (CD player section)**
  ① Playback time display
  ② PROGRAM mode indicator
  ③ Repeat playback indicator (⊂ ALL)
  ④ Function/Track number display

❺ **POWER button**
❻ **PRESET TUNING button**
  AUTO PRESET button
❼ **MEMORY button**
❽ **BAND/FM MODE button**
❾ **TUNING buttons**
  DOWN frequency
  UP frequency
❿ **VOLUME buttons**
  +: Use to increase the volume or tone (BASS/TREBLE).
  –: Use to decrease the volume or tone (BASS/TREBLE).
  (The level can be changed from VOL 0 to VOL 25.)



⑪ **Multi-Bass Horn button**
on: The Multi-Bass Horn indicator will light.
Set to this position to listen to the Multi-Bass Horn sound
off: The Multi-Bass Horn indicator goes out.
Set to this position when the Multi-Bass Horn sound is not required.

⑫ **Multi-Bass Horn indicator**

⑬ **Display window**
(Tuner section)
Band indicator (FM/AM)
Radio frequency display
MONO indicator
STEREO indicator
Preset station display
(Tape deck/amplifier section)
Tape mode display
CrO_2/METAL tape indicator
NORMAL speed indicator
HIGH speed indicator
Recording indicator (REC)
MULTI-BASS indicator

⑭ **BASS/TREBLE button**
Used to select BASS or TREBLE to be adjusted with the VOLUME button. (The level setting ranges are from –6 to 6.)

⑮ **TAPE (FOR PLAYBACK) switch**
Set this switch according to the type of tape to be used.
CrO_2•METAL: (playback only)
Set to this position to listen to a chrome (type II) or metal (type IV) tape.
NORMAL:
Set to this position to listen to a normal (type I) tape. The "normal tape" indicator is not indicated in the display window.

⑯ **DUBBING SPEED switch**
HIGH:
Set to this position when dubbing at high-speed.
NORMAL:
Set to this position when dubbing at normal-speed.

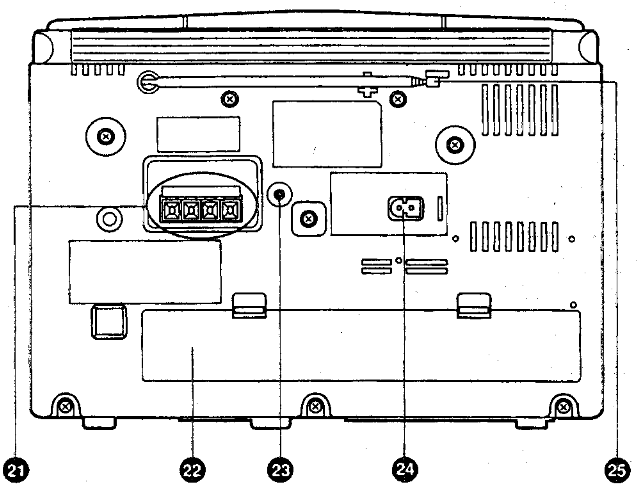
⑰ **Cassette holder (Deck A)**

⑱ **Cassette operation buttons (Deck A)**
○ REC:
Press this button with the ► PLAY button to start recording.
► PLAY:
Press to play the tape.
◄◄ REW:
Press to rewind the tape rapidly.
►► FF:
Press to wind the tape forward rapidly.
■/▲ STOP/EJECT:
Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.
II PAUSE:
Press to stop the tape momentarily. Press again to release the pause mode.

⑲ **Cassette holder (Deck B)**

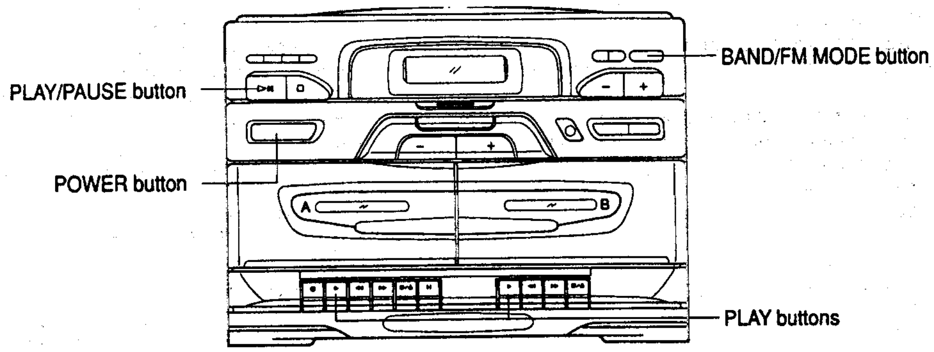
⑳ **Cassette operation buttons (Deck B)**
► PLAY:
Press to play the tape.
◄◄ REW:
Press to rewind the tape rapidly.
►► FF:
Press to wind the tape forward rapidly.
■/▲ STOP/EJECT:
Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.

● Rear Panel

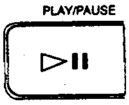


- ㉑ **SPEAKER terminals**
  Connect the provided speakers to these terminals.
- ㉒ **Battery compartment cover**
- ㉓ **Headphones jack (PHONES) (3.5 mm dia. stereo mini)**
  Connect headphones (impedance 16 Ω - 1 kΩ) to this jack. The speakers are automatically switched off when the headphones are connected.
- ㉔ **AC IN (AC input) jack**
- ㉕ **Telescopic antenna**

SWITCHING THE POWER ON/OFF



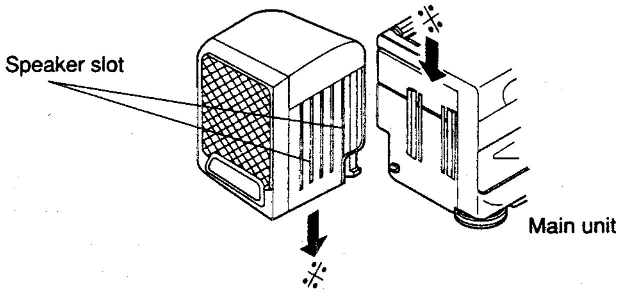
COMPU PLAY (only when AC power is used)
Even when the power is set to STANDBY, pressing the button shown below switches on the power and selects the source.

	Function mode	Operations
	CD	When this button is pressed with a CD loaded, CD playback begins.
Deck A or Deck B 	TAPE	When this button is pressed with a CD loaded, CD playback begins.
	TUNER	When this button is pressed, the tuner is engaged.

ATTACHING/DETACHING THE SPEAKERS

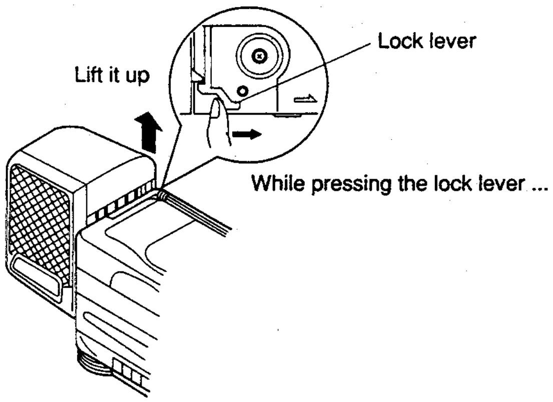
When using the speakers attached to the main unit
Hold with the bottom of the speaker against the top of the main unit and press down on the speaker to attach it.

Press the speaker down with the speaker and main unit aligned.



Note:
Since the speakers sound differently according to where they are placed, carefully place them for optimal effect within the length of the provided speaker cords. It is recommended that the left and right speakers be placed symmetrically in relation to the main unit.

When using the speakers detached from the main unit
Lift the speaker up to detach from the main unit by pressing the lock lever at the rear bottom of speaker in the direction of the arrow.

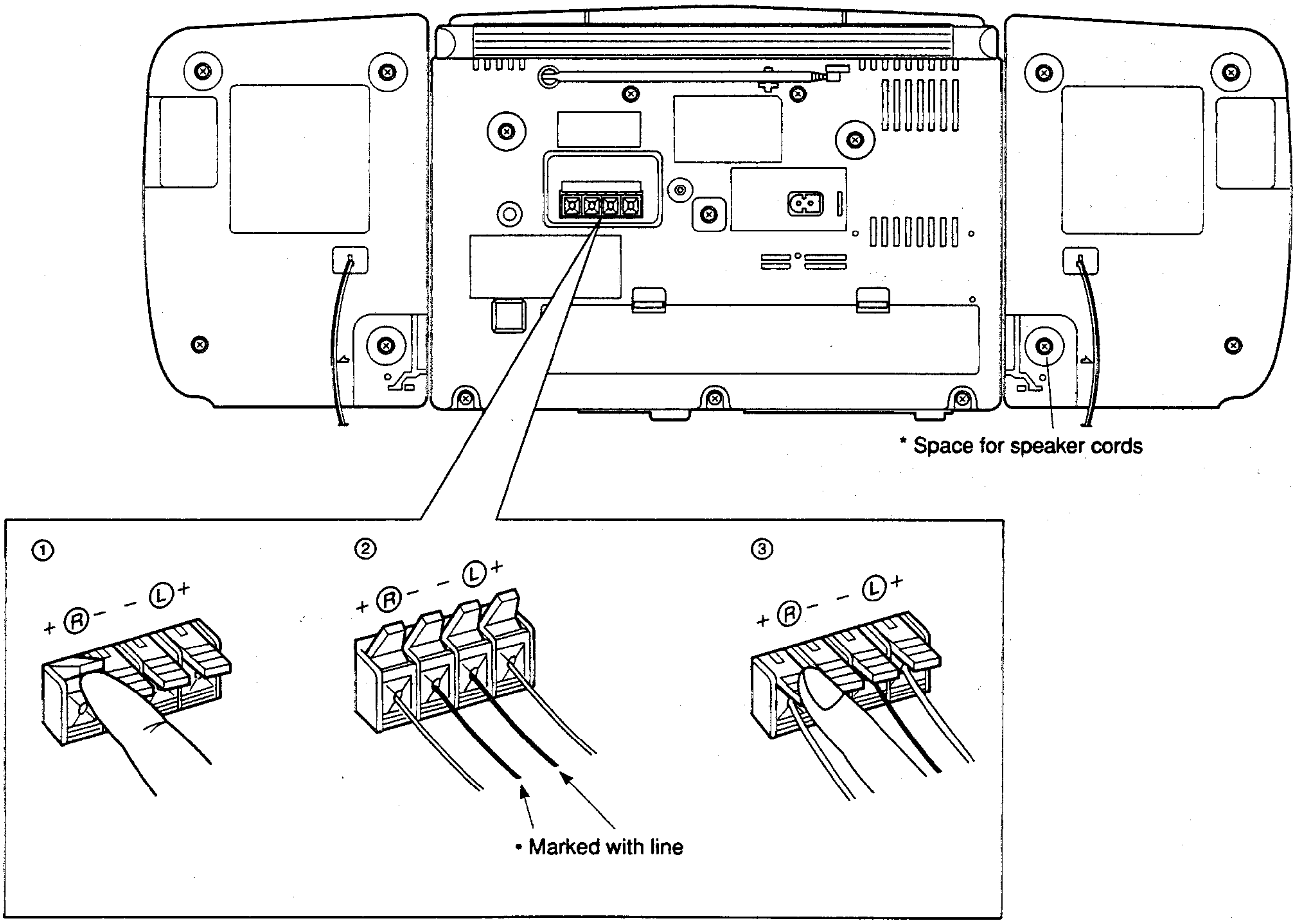


CONNECTIONS

- Do not switch the power on until all the connections are completed.

* After connecting the speaker cords, bundle any slack into the space for the speaker cords in the rear panel.

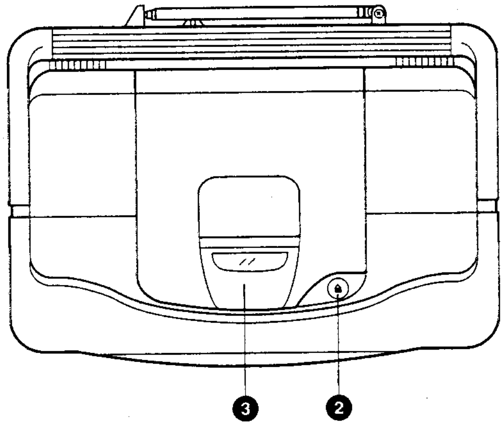
- When connecting the speaker cords, connect the one marked with a line to the "–" terminal first.

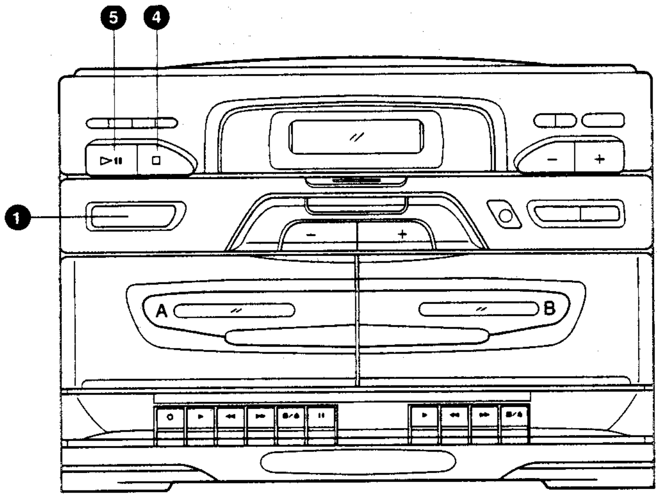


PLAYING COMPACT DISCS

Playing an entire disc ... The following example assumes a compact disc with 12 tunes and a total playing time of 48 minutes 57 seconds.

Operate in the order shown



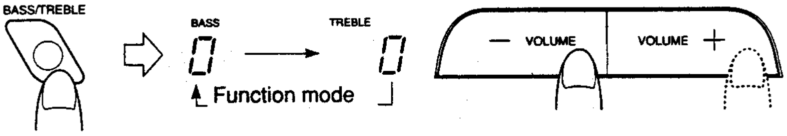


❶ Set the POWER button to on.
❷ Press to open the Disc holder.
❸ Load a disc with the label side facing up and close the Disc holder.
❹ Set to the CD mode.
  - If the PLAY button of deck A or B is pressed, press the STOP/EJECT (■/▲) button to set to the stop mode.
  - When a CD is first loaded, the total number of tracks (tunes) and total playing time are displayed.
❺ Press to start play.
  - As tunes are played, their track numbers go out one by one.

- 8-cm (3-3/16") compact discs can be used in this unit without an adapter.

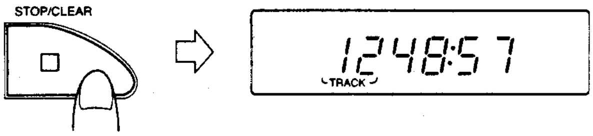
To adjust BASS/TREBLE

Press the BASS/TREBLE button to select BASS or TREBLE to be adjusted. Within about 5 seconds, press the VOLUME button (+/–) to adjust the level within a range of –6 to 6. (Level should be adjusted in BASS or TREBLE.)



To stop play

- **To stop in the middle of a disc**
  During playback, press the STOP/CLEAR (□) button to stop play.



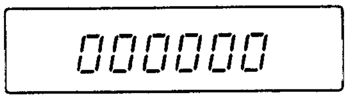
- **To stop a disc temporarily**
  Press the PLAY/PAUSE (▷II) button to stop play temporarily. When pressed again, play resumes from the point where it was paused.

Caution:

- To change discs, press the STOP/CLEAR (□) button; check that the disc has stopped rotating completely before unloading it.

Notes:

- The following indication may be shown when a disc is dirty or scratched, or when the disc is loaded upside down.
  In such a case, check the disc and insert again after cleaning the disc or turning it over.



- **Do not use the unit at excessive high or cold temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).**
- After playback, unload the disc and close the Disc holder.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

Skip playback

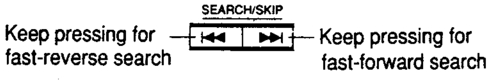
- During playback, it is possible to skip forward to the beginning of the next tune or back to the beginning of the tune being played or the previous tune; when the beginning of the required tune has been located, play starts automatically.

To listen to the next tune ...
Press the ►►I button once to skip to the beginning of the next tune.

To listen to the previous tune ...
Press the I◄◄ button to skip to the beginning of the tune being played back and press again to skip to the beginning of the previous tune.

Search playback (to locate the required position on the disc)

- The required position can be located using fast-forward or reverse search while playing a disc.

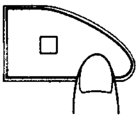

SEARCH/SKIP
Keep pressing for fast-reverse search
Keep pressing for fast-forward search

- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

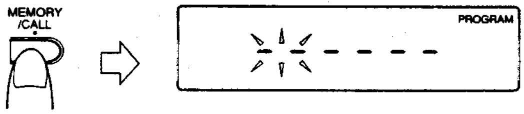
Programmed play

- Up to 20 tunes can be programmed to be played in any required order.
  The total playing time of programmed tunes is displayed (up to 99 minutes, 59 seconds).
  (Example: When programming the 2nd tune to be played first, and the 6th tune next, etc.)

①

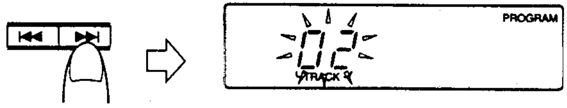


②



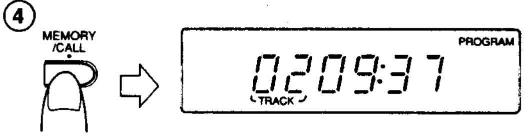
③

To designate the 2nd tune.

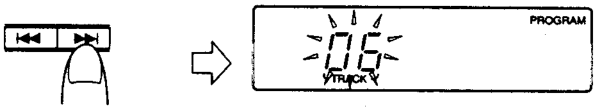


Press twice.

④

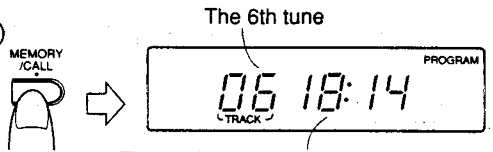


⑤



Press four times.

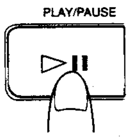
⑥



The 6th tune

The total playback time of programmed tunes is displayed.

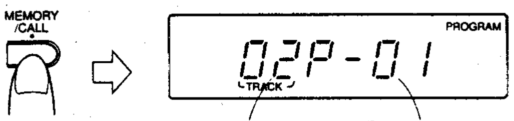
⑦



① Press the STOP/CLEAR (□) button.
② Press the MEMORY/CALL button to set to the programming mode.
③ Press to designate the required track number.
④ Press the MEMORY/CALL button.
⑤ Designate the remaining tunes by pressing the ►►I button.
⑥ Press the MEMORY/CALL button.
⑦ Press the ▷II button when programming is completed. Programmed playback starts.

To clear the programmed tunes ...
Press the STOP/CLEAR (□) button before playing a disc. During programmed playback, press this button twice. When the Disc holder is opened, programmed tunes are cleared automatically.

To confirm the details of a program ...
Press the MEMORY/CALL button for more than 2 seconds; the tunes making up the program will be displayed in programmed order.



Tune number

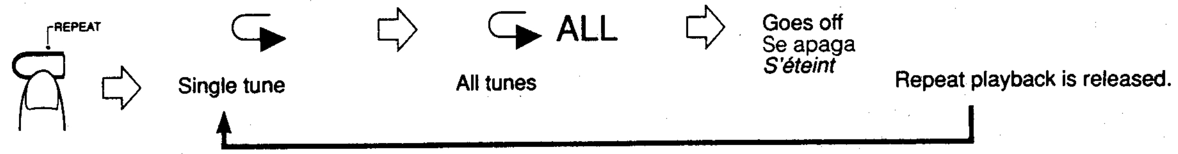
Program order number

Notes:
1. If the total playing time of the programmed tunes exceeds 99 minutes 59 seconds, the total playing time indication will go out.
2. Programming of track (tune) number 21 or more is impossible.

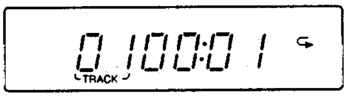
Repeat play

Press the REPEAT button before or during play. A single tune or all the tunes can be repeated.

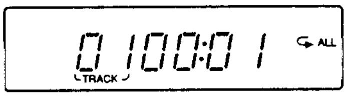
Whether a single tune or all tunes are to be repeated can be specified. Each time the REPEAT button is pressed, the mode will change from a single tune (⊂), to all the tunes (⊂ ALL), to the clear mode, in this order.



- **Repeat playback of a single tune (⊂)**
  The tune being played back will be heard repeatedly.



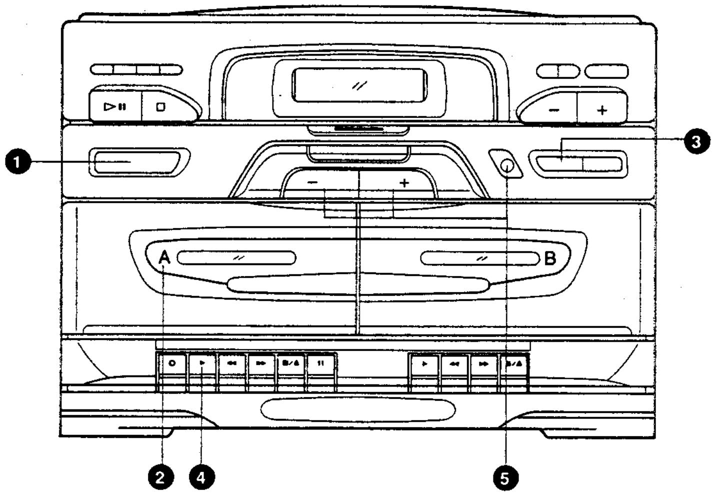
- **Repeat playback of all tunes (⊂ ALL)**
  When playing back an entire disc or programmed tunes, all tunes or the programmed tunes will be heard repeatedly.



CASSETTE PLAYBACK

(The example shows Deck A)

Operate in the order shown



❶ Set the POWER button to on.
❷ Load a cassette tape in Deck A.
❸ Set the TAPE switch as required.
❹ Press to start playback.
❺ Adjust the volume and tone.

- **Playback in Deck B**
  The previous procedures ❸ through ❹ also apply to Deck B when a cassette is loaded in Deck B. When Decks A and B are simultaneously set to the play mode, only the playback sound of Deck B is heard.

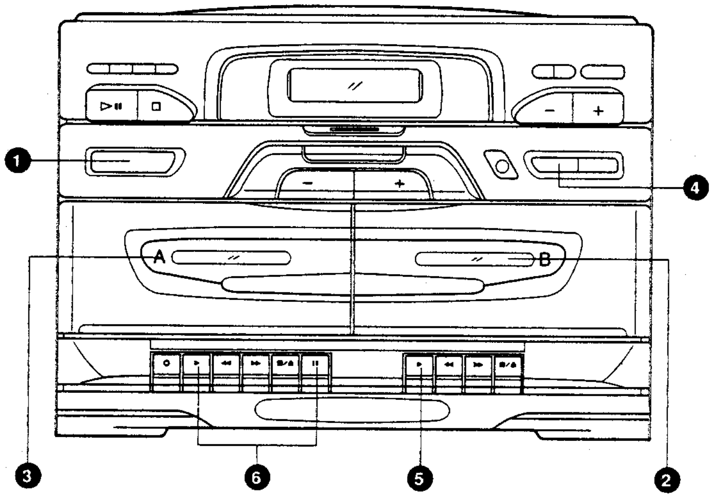
Notes:

1. When the power is turned off while the tape is still running, cassette operation buttons which are depressed do not return to the original positions.
   Press the STOP/EJECT (■/▲) button to stop the tape running before turning off (STANDBY) the power.
2. Avoid operating the FF or REW button on the deck during playback of the other deck.

RELAY PLAYBACK

(From Deck B to Deck A)

Operate in the order shown



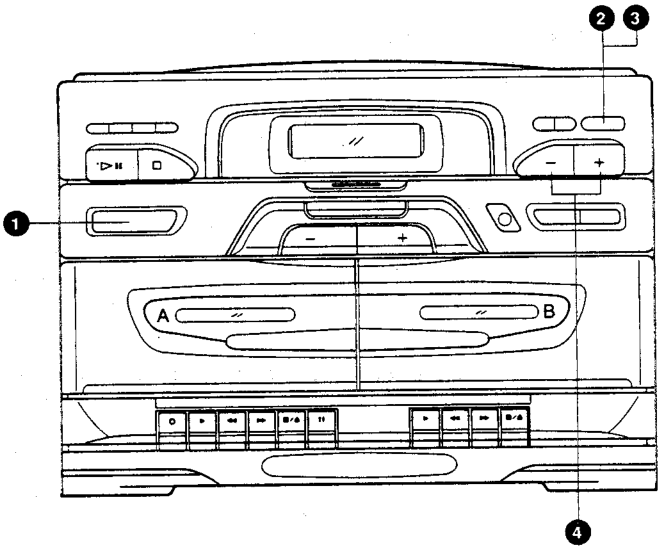
❶ Set the POWER button to on.
❷ Load a cassette tape in Deck B.
❸ Load a cassette tape in Deck A.
❹ Set the TAPE switch as required.
❺ Press the ► PLAY button on Deck B.
❻ Set Deck A to the play-pause mode.

When Deck B stops, Deck A's pause mode will be released and it will start playback. When Deck A stops automatically, relay playback will be released.

Note:
Use the same type of tape in Decks A and B during this mode.

RADIO RECEPTION

Operate in the order shown



❶ Set the POWER button to on.
❷ Press the BAND/FM MODE button; a band and radio frequency will be shown in the display.
  - If the PLAY (►) button of the deck is pressed, press the STOP/EJECT (■/▲) to set to the stop mode.
❸ Select the band/FM mode (FM auto, FM MONO or AM).
❹ Tune to the required station.

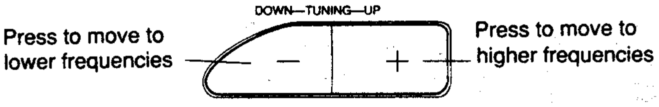
FM MODE button

Auto mode:
Set to this position when listening to or recording an FM stereo broadcast. The STEREO indicator lights when an FM stereo broadcast is received.

MONO:
Set to this position when FM stereo reception is noisy. When another station is tuned to in the MONO mode using the TUNING UP/DOWN or PRESET TUNING/AUTO PRESET button, the unit automatically enters Auto mode.

- **Seek tuning**
  Press the UP or DOWN button for one second or more; the unit enters the seek tuning mode and tunes to higher or lower frequencies, and when the broadcast is received, it stops tuning automatically and the broadcast can be heard.

- **Manual tuning**
  Each time the UP or DOWN button is pressed, the unit steps through the current frequency band. Tuning is in steps of 100 kHz for FM and 10 kHz for AM.


DOWN—TUNING—UP
Press to move to lower frequencies
Press to move to higher frequencies

Notes:
- When seek tuning to the required station is not possible because it is broadcasting too weak a signal, press the UP or DOWN button momentarily to perform manual tuning.
- When the power is set to STANDBY, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again and BAND/FM MODE button is pressed, the same station will be heard.

Auto preset tuning

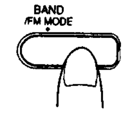
This function scans the current band (FM or AM), detecting frequencies used to broadcast signals, and stores the first 15 frequencies in memory automatically.
- Press the AUTO PRESET button for more than 2 seconds. The frequencies of stations broadcasting signals can be preset automatically in the order of increasing frequency. (15 stations in each band (FM and AM.))

Presetting stations

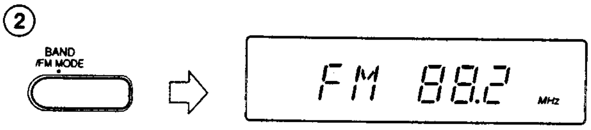
15 stations in each band (FM and AM) can be preset as follows:

- Example (when presetting an FM station broadcasting at 103.5 MHz to preset button "15")

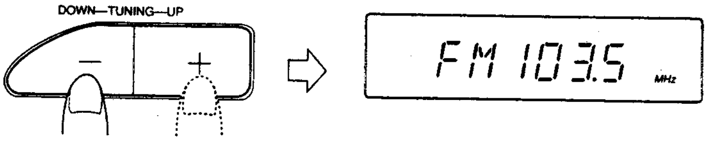
①



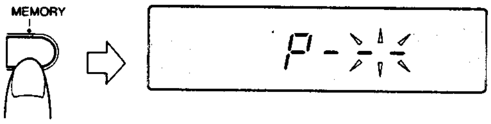
②



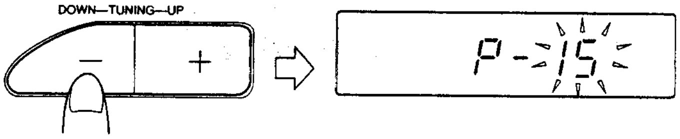
③



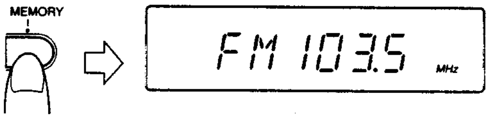
④



⑤



⑥



❶ Press the BAND/FM MODE button.
❷ Select the FM band using the BAND/FM MODE button.
❸ Tune to the required station.
❹ Press the MEMORY button.
❺ Set the preset station "15". (When "15" blinks in the preset station display.)
❻ Press the MEMORY button so that an FM station broadcasting at FM 103.5 MHz will be preset to preset station15.

- Repeat the above procedure for each of the other stations, using a different preset button each time.
- Repeat the above procedure for the AM band.

- **To change preset stations**
  Perform step ❹ above after tuning to the required station.

Notes:

- The previous preset station is erased when a new station is set as the new station's frequency replaces the previous frequency in memory.

Preset tuning

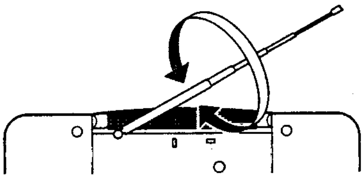
- The stations must be preset before this operation can be performed.

① Press the BAND/FM MODE button.
② Select the band (FM or AM) using the BAND/FM MODE button.
③ Press the PRESET TUNING button to select the required preset station (P-1–P-15).

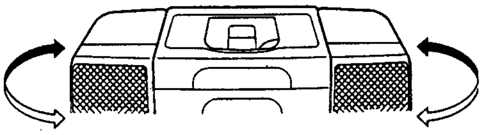
- The preset station number and frequency are shown in the display in sequence each time the PRESET TUNING button is pressed.

Using the antennas

FM



AM



Note:
The built-in ferrite core antenna can pick up interference from television receivers in the neighborhood and thereby disturb AM reception.

RECORDING

- In recording, the ALC circuit automatically optimizes the recording level; adjustment of the recording level is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

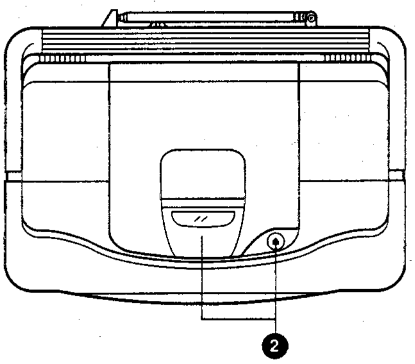
Notes:
1. The recording characteristics of this unit are those of normal tape. Normal tape has different characteristics from CrO_2 and metal tapes.
2. Do not operate any button on deck B during recording.

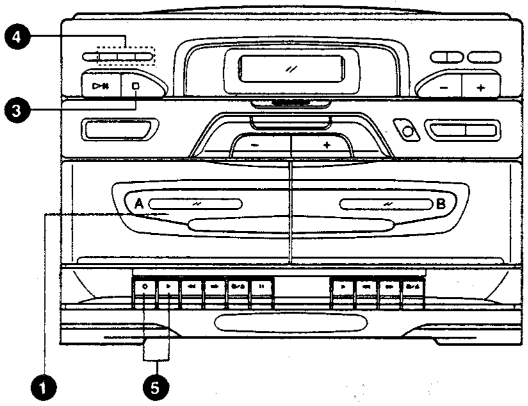
It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

Synchronized recording with the CD player

- In this system, the CD player starts playback when Deck A enters the recording mode.

Operate in the order shown





❶ Load a cassette tape in deck A.
❷ Load a disc and close the Disc holder.
❸ Set the CD mode.
  - When the ► PLAY button of deck is pressed, press the STOP/EJECT (■/⏏) button to set to the stop mode and perform this operation.

❹ When programmed playback is required, program the required tunes. (See page 21.)
  - Select tunes with a total playing time which does not exceed the tape length.

❺ Press the ○ REC button with the ► PLAY button; synchronized recording will start.

- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- When the tape reaches the end first, the CD player stops automatically; when the CD player stops first, the tape continues running. In this case, press the ■/⏏ STOP/EJECT button to stop the tape.

- **When automatic spacing between tunes is not required ...**
  Perform the following after finishing the previous operation (❶ to ❹).

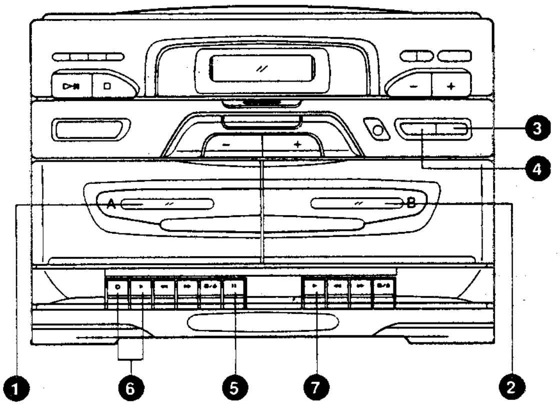
① Press the ▷ıı PLAY/PAUSE button of the CD player twice. The CD player enters the pause mode.
② Press the ○ REC and ► PLAY buttons simultaneously. Now, the CD player starts playback simultaneously.

Note:
To record a compact disc, be sure to check that the track (tune) number and playing time are displayed on the display window before pressing the ○ REC button and ► PLAY button.

DUBBING (SYNCHRO START DUBBING)

Normal and high-speed dubbing can be done from Deck B to Deck A.

Operate in the order shown



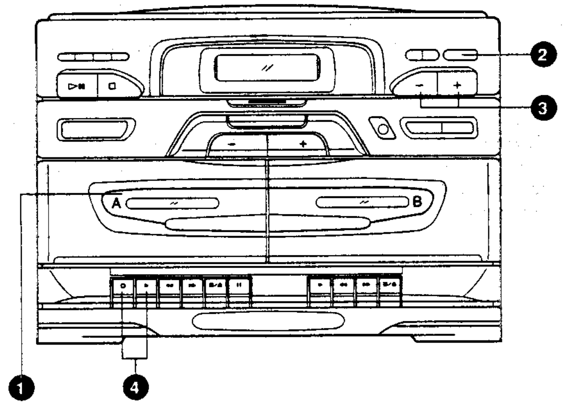
❶ Load a cassette tape in deck A. (Refer to the note on page 31.)
❷ Load a pre-recorded cassette tape in deck B.
  - Slightly press the ► PLAY button to set to TAPE mode. (The button should not be locked.)
❸ Set to NORMAL SPEED or HIGH SPEED.
❹ Set to correspond to the type of tape in Deck B.
❺ Press the ❚❚ PAUSE button.
❻ Press the ○ REC button with the ► PLAY button. (Record-pause mode.)
❼ Press the ► PLAY button. (Synchronized dubbing will start.)

Notes:

1. Television receivers placed close to this unit may cause interference on the recorded signal when this unit is used in the high-speed dubbing mode. If this happens, either turn off the television receiver or use the normal-speed dubbing mode.
2. With Deck A in the record-pause mode, the ❚❚ PAUSE button is released when Deck B enters the stop mode.

Recording from the radio

Operate in the order shown



❶ Load a cassette. (Deck A)
❷ Press the BAND/FM MODE button.
❸ Tune to the required station.
❹ Press the ○ REC button with the ► PLAY button.

- To stop recording temporarily, press the ❚❚ PAUSE button. To resume recording, press the ❚❚ PAUSE button again.

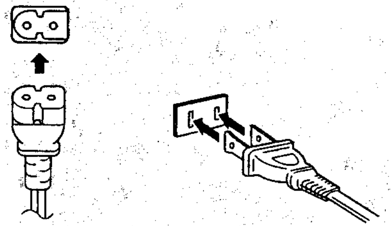
Erasing

When recording on a pre-recorded tape, the previous recording is automatically erased and only the new material can be heard when the tape is played.
To erase a tape without making a new recording ...
Slightly press the ► PLAY button of the deck to set to the TAPE mode and press the ○ REC and ► PLAY buttons together after pressing the ■/⏏ STOP/EJECT button.

POWER SUPPLY

A. Operation on household AC

- **Connect the AC power cord**



- The provided AC power cord for this unit has certain one-way direction connections to prevent electric shock. Refer to the illustration above for correct connection.

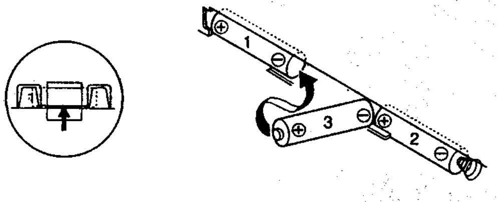
CAUTIONS:
1. ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT. REMOVE BATTERIES WHEN USING THE POWER CORD.
2. BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.

B. Batteries for memory back-up system

Batteries for preset station memory

It is recommended that batteries are loaded to prevent the preset station memory from being erased when there is a power failure, or when the AC power cord is disconnected.

- **Loading batteries**
  Load three "AA" size batteries (optional) into the battery compartment.



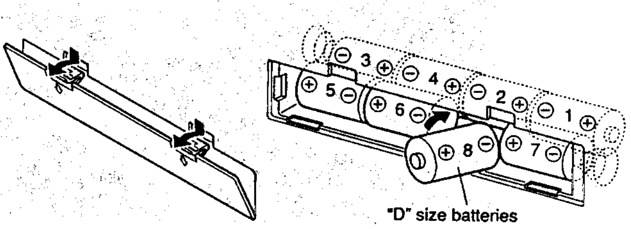
- When removing the batteries, push from the bottom as shown by the arrow.

Notes:
- The three "AA" size batteries supply the power to the memory back-up system which prevents the contents of memory being lost when there is a power failure, or the AC power cord is disconnected. Battery power is not consumed when the AC power cord is connected to the household AC outlet.
- When the AC power cord is not connected, the batteries should be replaced with new ones approximately every three months.

C. Operation on batteries

- **Loading batteries**

1. Open the battery cover by pulling it toward you while pressing the sections marked by the arrows.
2. Insert eight "D" size batteries as shown in the diagram.
   * Be careful to insert the batteries with the ⊕ and ⊖ terminals positioned correctly.
3. Replace the cover.



"D" size batteries

Checking batteries
When the tape speed or output sound decreases, or CD playback is intermittent, replace all batteries with fresh ones. When making an important recording, use new batteries (preferably alkaline batteries with a longer service life) to avoid any possible failure.
- For better battery usage
  Continuous operation of the unit causes the battery power to be consumed quicker than noncontinuous operation. Operation of the unit in a cold place causes the battery power to be consumed more quickly than in a warm place.

CAUTIONS:
- WHEN NOT USING THE UNIT FOR A LONG TIME (MORE THAN TWO WEEKS) OR WHEN ALWAYS USING HOUSEHOLD AC, REMOVE THE BATTERIES TO AVOID A MALFUNCTION OR DAMAGE TO THE UNIT.
- WHEN THE JVC POWER CORD PROVIDED WITH THIS UNIT IS CONNECTED, THE POWER IS AUTOMATICALLY SWITCHED FROM THE BATTERIES TO THE HOUSEHOLD AC EVEN WHEN THE BATTERIES ARE LOADED. HOWEVER, REMOVE THE BATTERIES WHEN USING THE POWER CORD.

CAUTIONS WHEN USING BATTERIES:
When batteries are used incorrectly, it may result in the leakage of chemicals from the batteries or they may explode. The following care should be taken;
- Check that the positive ⊕and negative ⊖terminals of the batteries are positioned correctly and load them as shown in the diagram.
- Do not mix new and old batteries together, or mix different types of batteries.
- Do not try to recharge non-rechargeable batteries.
- Remove the batteries when the unit is not to be used for an extended period of time.

If chemicals from the batteries come in contact with your skin, wash them off immediately with water. If chemicals leak onto the unit, clean the unit completely.

6. Location of Main Parts

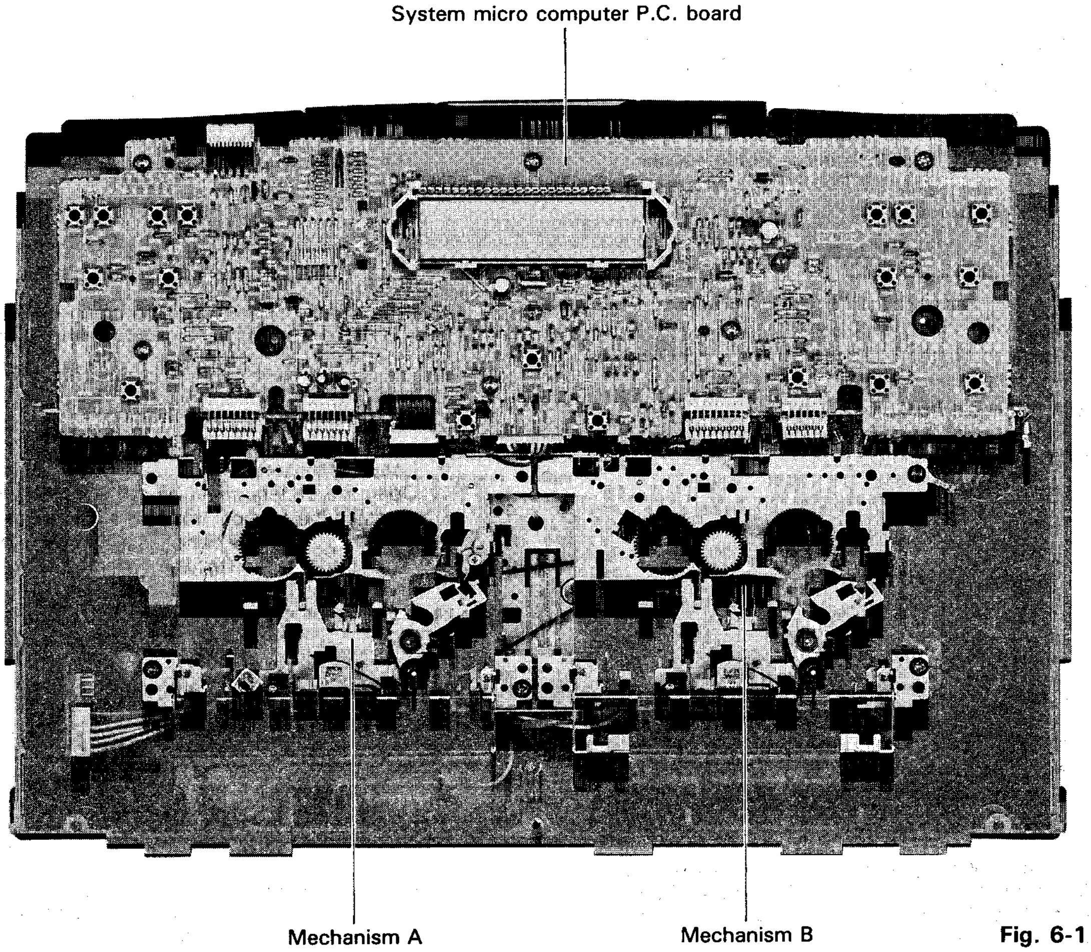


Fig. 6-1

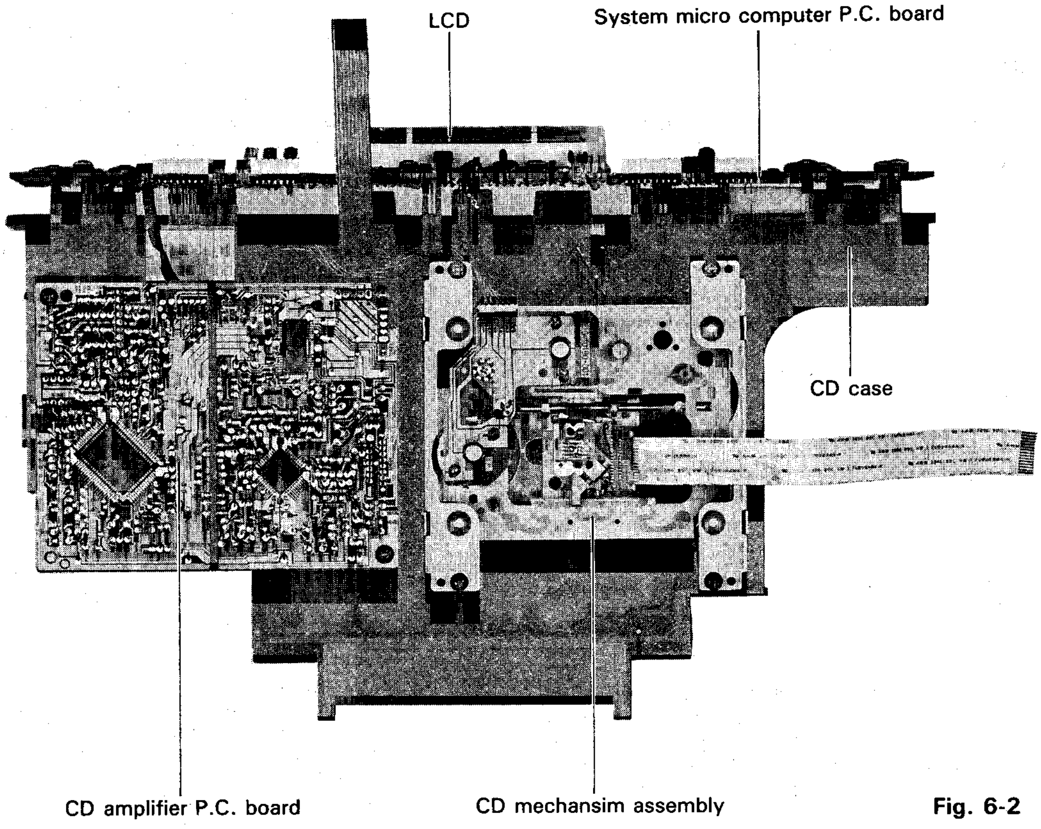


Fig. 6-2

7. Removal of Main Parts

■ Front Cabinet Assembly (refer to Fig. 7-1, 7-2)

1. Remove the six screws ① retaining the rear cabinet assembly of the body.
2. Remove the two screws ② retaining both sides of the front cabinet assembly.
3. Press the STOP/EJECT buttons on both decks A and B and open the cassette door.
4. Turn the front cabinet upward and dismount the front cabinet assembly from the body.

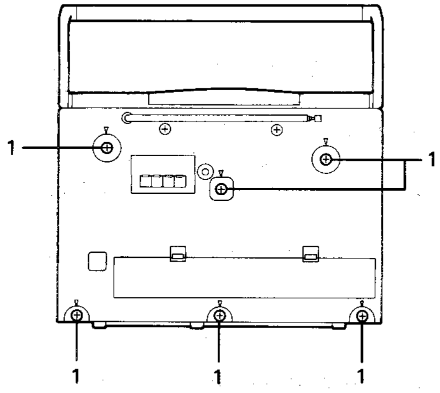
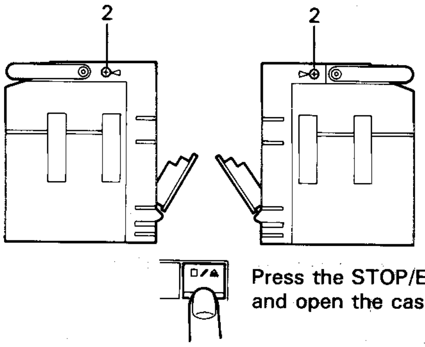


Fig. 7-1



Press the STOP/EJECT button and open the cassette door.

Fig. 7-2

■ CD Player Assembly (refer to Fig. 7-3, 7-4)

1. Turn the body backward and remove the two screws ③ retaining the CD player assembly.
2. After putting the hand onto the right and left back sidea Ⓐ, Ⓑ) of the CD case retaining the system microcomputer P.C. board, draw out and dismount the case to the front side.
   (Then, the connector CN303, CN304, CN305 and CN306 on the main P.C. board, and the connectors CN801, CN802, CN803 and CN804 on the system microcomputer P.C. board will be disconnected).
3. From the connector CN302 on the main amplifier P.C. board, disconnect the 5 PIN parallel wire outgoing from the connector FW501 on the CD amplifier P.C. board.

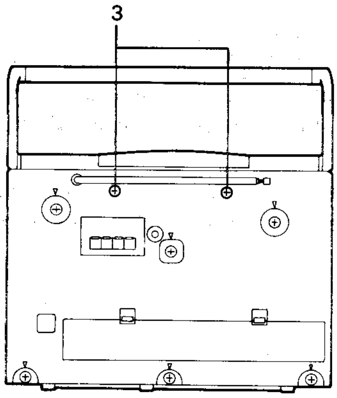


Fig. 7-3

■ System Micro Computer P.C. Board (refer to Fig. 7-4)

1. Remove the six screws ④ retaining the system micro computer P.C. board from the CD player assembly.
2. From the connector CN805 on the system micro computer P.C. board, disconnect the parallel wire outgoing from the connector CN601 on the CD amplifier P.C. board.
3. From the connector CN806 on the system microcomputer P.C. board, disconnect the #2 PIN paralle wire outgoing from the CD door close switch P.C. board.

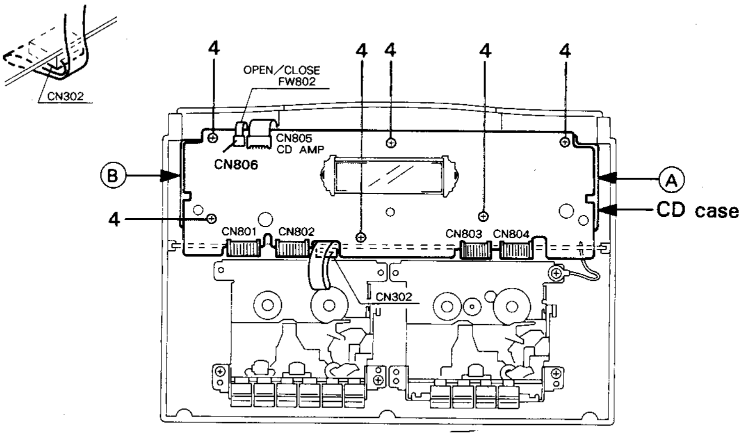


Fig. 7-4

■ CD Amplifier P.C. Board (refer to Fig. 7-5)

1. Remove the three screws ⑤ retaining the CD amplifier P.C. board from the CD player chassis.
2. From the connector P011 on the CD mechanism P.C. board, disconnect the 6 PIN connector outgoing from connector CN501 on the CD amplifier P.C. board.
3. From the connector CN501 on the CD amplifier P.C. board, remove the parallel wire outgoing from the CD pickup P.C. board.
4. Remove the screw ⑦ retaining the CD door close switch P.C. board.

■ CD Mechanism Assembly (refer to Fig. 7-5)

Remove the four screws ⑥ retaining the CD mechanism assembly.

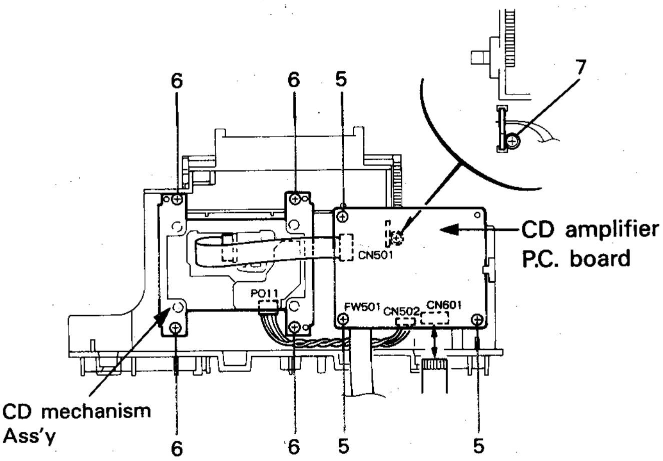


Fig. 7-5

■ Cassette Mechanism Assembly (refer to Fig. 7-6)

1. Remove the four screws ⑧ retaining the cassette mechanism assembly.
2. From the connector CNA31 on the main P.C. board, disconnect the 3 PIN connector outgoing from the play head of the cassette mechanism B.
3. From the connector CNA32 on the main amplifier P.C. board, disconnect the 2 PIN and 5 PIN connectors outgoing from the Record/Play head of the cassette mechanism A.
4. From the connector CNA36 on the main amplifier P.C. board, disconnect the 4 PIN parallel wire outgoing from the drive motor.

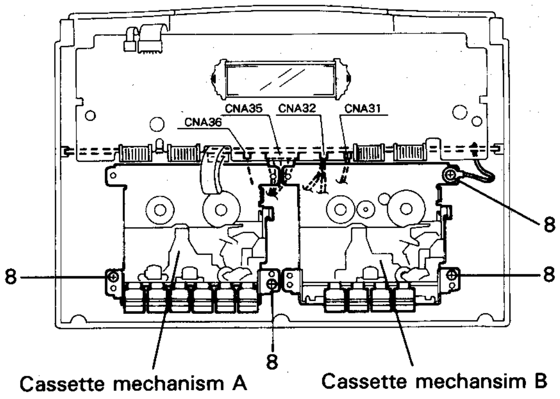


Fig. 7-6

■ Main Amplifier P.C. Board (refer to Fig. 7-7 ~ 7-10)

1. Remove the four screws ⑨, ⑩ retaining the main amplifier P.C. board.
2. From the test point TP1 on the main amplifier P.C. board, pull out the antenna wire outgoing from the rod antenna.

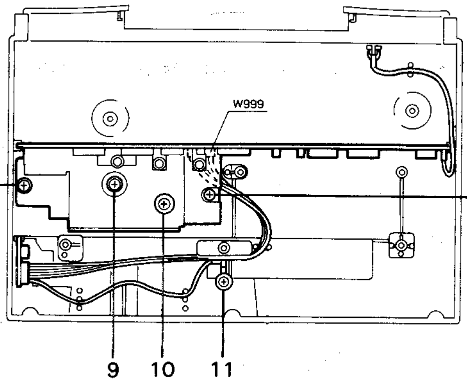


Fig. 7-7

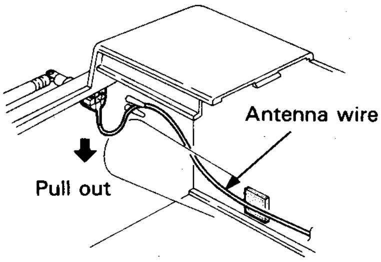


Fig. 8-8

3. Remove the screw ⑪ retaining the [+] battery contact P.C. board.
4. After turning back the body, dismount the battery cover. Next, remove the clow B retaining the [–] battery contact P.C. board, and draw it out to the front side (refer to Fig. 7-10).
5. Draw out the [–] and [+] battery contact P.C. boards together at the same time.

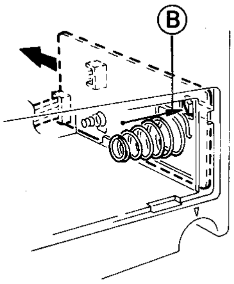


Fig. 7-10

■ Heat Sink (refer to Fig. 7-11)

1. Remove the three screws ⑫ retaining the IC101 and Q902, Q921 from the heat sink.
2. Remove the heat sink from the main P.C. board.

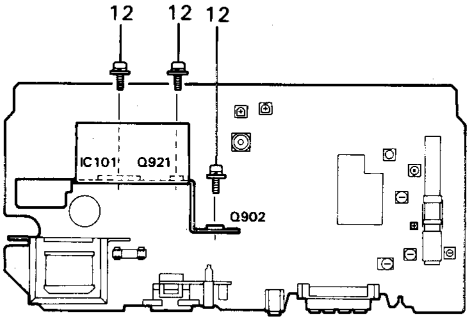


Fig. 7-11

8. Analytic Drawing and Parts List

■ Analytic Drawing of Cassette mechanism : Block No. M 1

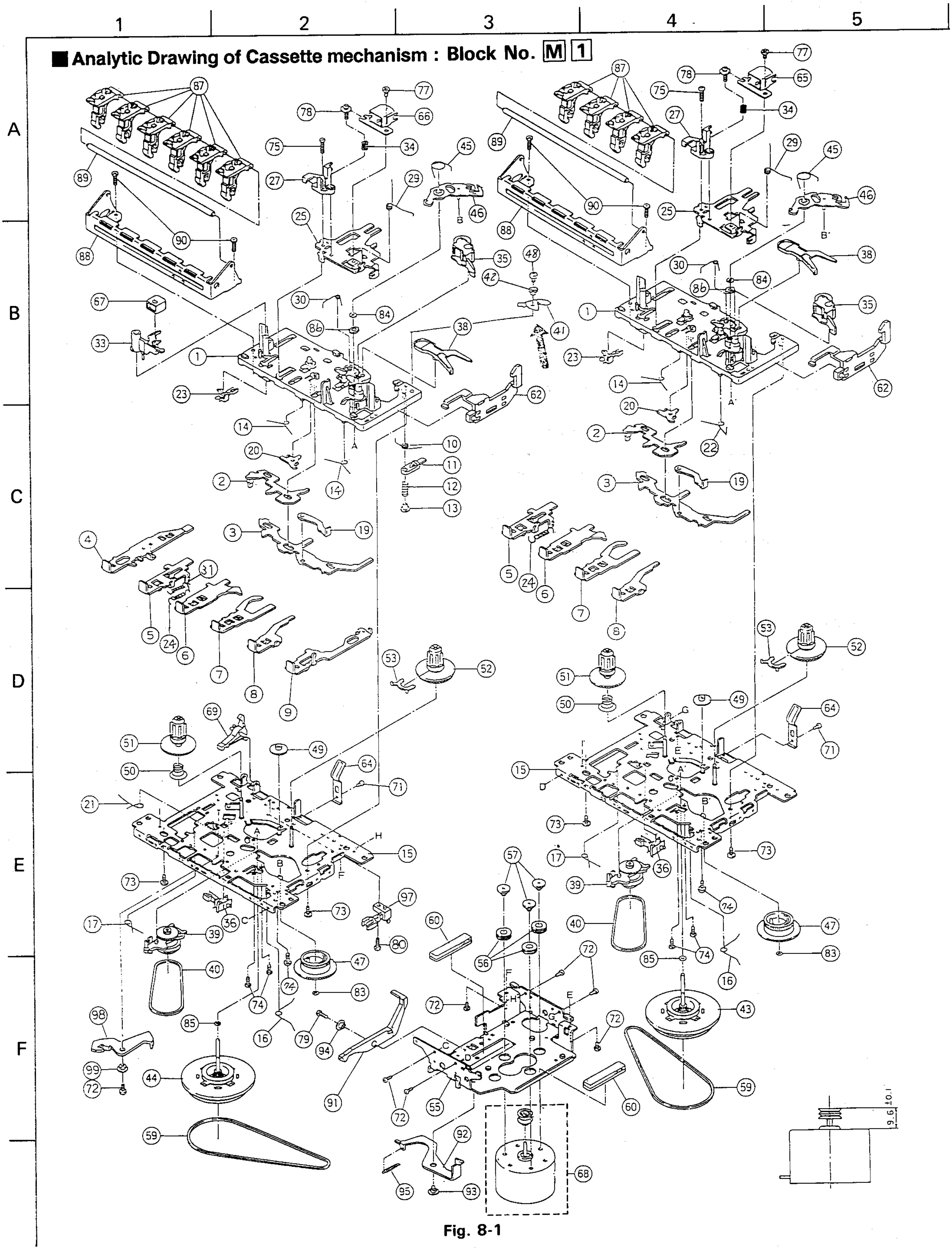


Fig. 8-1

Cassette Mechanism Parts List

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	192114301ZT	BASE ASS'Y		2		
	2	19211409T	SWITCH ACTUATOR		2		
	3	19211408T	LOCK CAM		2		
	4	19211422T	BUTTON LEVER	REC DECK A	1		
	5	19211484T	BUTTON LEVER	PLAY	2		
	6	19211424T	BUTTON LEVER	REW	2		
	7	19211425T	BUTTON LEVER	FF	2		
	8	19211426T	BUTTON LEVER	STOP	2		
	9	19211461T	BUTTON LEVER	PAUSE DECK A	1		
	10	19211413T	TORSION SPRING		1		
	11	19211455T	PAUSE LEVER (E)		1		
	12	19211412T	SPRING	PAUSE	1		
	13	19211411T	PAUSE STOPPER		1		
	14	19211414T	TORSION SPRING	BUTTON LEVER	3		
	15	192101501ZT	CHASSIS ASS'Y		2		
	16	19211416T	TORSION SPRING	E.ACTUATOR	2		
	17	19211417T	TORSION SPRING	PS. LEVER	2		
	19	182101159T	E.KICK LEVER		2		
	20	19211420T	STOPPER	PINCHROLLER	1		
	21	19211421T	TORSION SPRING	REC BUTTON	1		
	22	19211433T	TORSION SPRING	SPRING C	1		
	23	MSW-1541T	LEAF SWITCH		2		
	24	18210150T	PLAY BUTTON LEV	PLAY BUTTON	2		
	25	19210311T	HEAD PANEL		2		
	27	19210304AT	HEAD BASE		2		
	29	19210309T	PANEL P SPRING		2		
	30	19211418AT	SPRING	M.CONTROL	2		
	31	18211311T	TENSION SPRING	E.SLIDE LEVER	1		
	33	19210305T	MAGNET HEAD ARM		1		
	34	18210307T	AZIMUTH SPRING		2		
	35	192104309T	P.ROLL. ARM ASY		2		
	36	640101161T	LEAF SWITCH	MSW-17820MVD0	2		
	38	19212604TT	SENSING LEVER		2		
	39	192107304T	RF CLUCH ASS'Y		2		
	40	18210711T	RF.BELT		2		
	41	19211434T	P.ROLLER ARM		1		
	42	19211437T	P ARM COLLAR		1		
	43	192109304ZT	FLYWHEEL ASS'Y		1		
	44	192109303ZT	FLYWHEEL ASS'Y		1		
	45	19212605T	TORSION SPRING		2		
	46	192126502ZT	GEAR PLATE ASSY		2		
	47	19212602T	CAM GEAR		2		
	48	99992041T	SPECIAL SCREW	M2X3	1		
	49	18211070T	F.FORWARD GEAR		2		
	50	18211099T	BACK TENSION SP		2		
	51	192105304T	S. REEL ASS'Y		2		
	52	192105303T	T. REEL ASS'Y		2		
	53	19210506T	SENSOR		2		
	55	19211211T	MOTOR BRACKET		1		
	56	18211266T	MOTOR RUBBER		3		
	57	18511418T	COLLAR SCREW	FOR MOTOR	3		
	59	19210923T	MAIN BELT		2		
	60	19211212T	MAT		2		
	62	19211302T	EJ. SLIDE LEVER		2		

BLOCK NO. M1MM□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	64	18291001T	PACK SPRING		2		
	65	MS15R-AA2N1	R/P HEAD		1		
	66	MS15R-AA2N1	R/P HEAD		1		
	67	PHK-MSI-6A	ERASE HEAD		1		
	68	1921123065T	MOTOR ASS'Y	WITH PULLY	1		
	69	18211069T	REC.SAF.LEVER		1		
	71	91790000T	TAPPING SCREW	M2X3	2		
	72	91800000T	SCREW	M2X4	7		
	73	96790000T	TAPPING SCREW	M2X5	4		
	74	99991809T	SPECIAL SCREW	M2X4.5	6		
	75	SPSP2006Z	SCREW	M2X6	2		
	77	SDSP2003Z	SCREW	M2X3	2		
	78	SPSP2007Z	SCREW	M2X7	2		
	79	91820000T	SCREW	M2X6	1		
	80	91810000T	SCREW	M2X5	1		
	83	94220000T	P.WASHER	1.2X3.8X0.3	2		
	84	99990313T	POLY.CUT WASHER	1.45X3.8X0.5	2		
	85	98820000T	POLY.WASHER	2X3.5X0.4	2		
	86	99370000T	POLYSLIDER WAS.	2.1X4X0.13	2		
	87	18213107T	OPERATION LEVER		10		
	88	18213106T	BUTTON FRAME		2		
	89	18293103T	LEVER SHAFT		2		
	90	99991402T	MINI SCREW	M2X8	4		
	91	19211209T	P.KICK LEVER(B)		1		
	93	18211224T	COLLAR SCREW		1		
	94	18211265T	COLLAR (B)		1		
	95	18211312T	SPRING		1		
	97	64010138T	LEAF SWITCH		1		
	98	19210201T	REC ARM		1		
	99	19211437T	P ARM COLLAR		1		

Enclosure Assembly Section: Block No. M 2

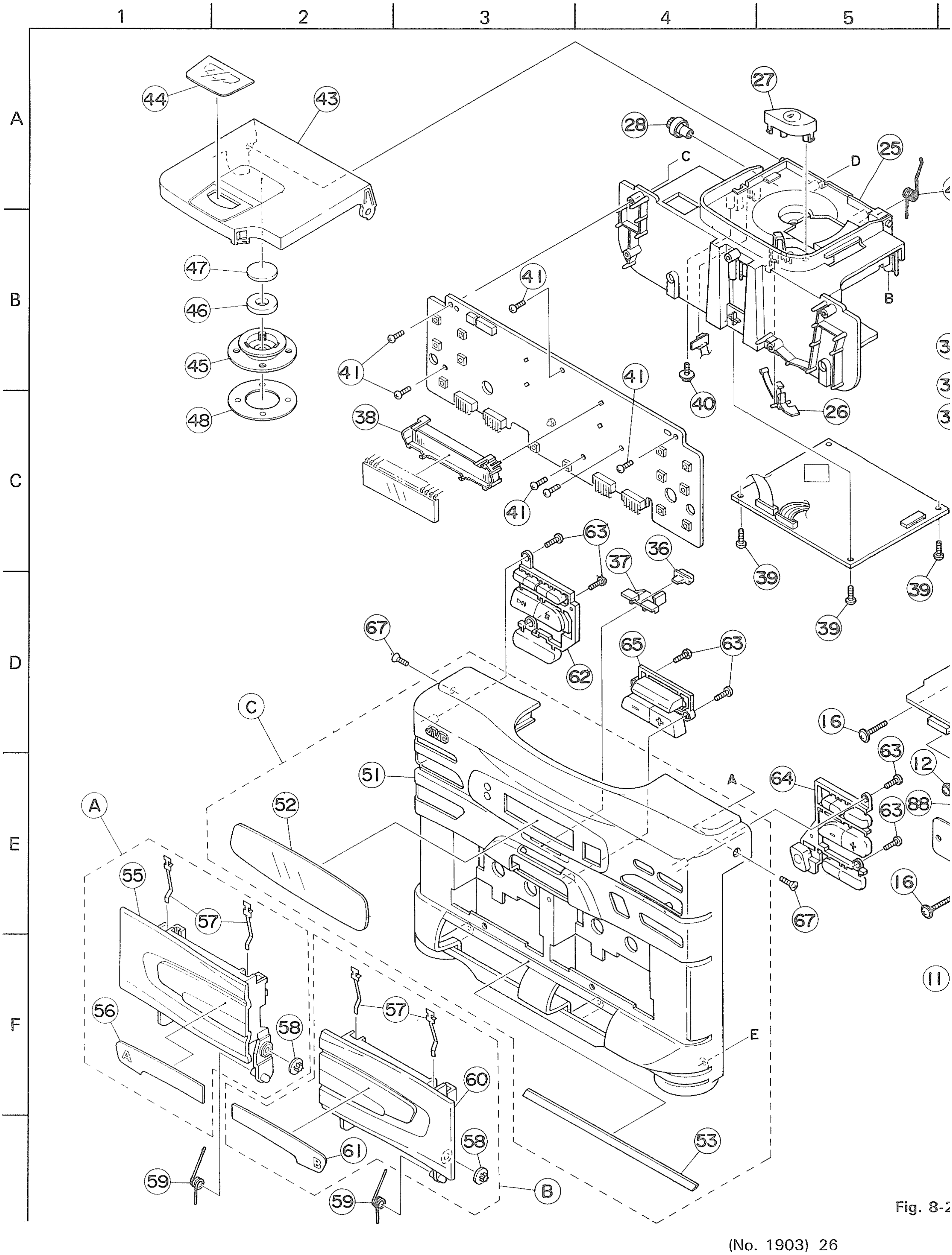
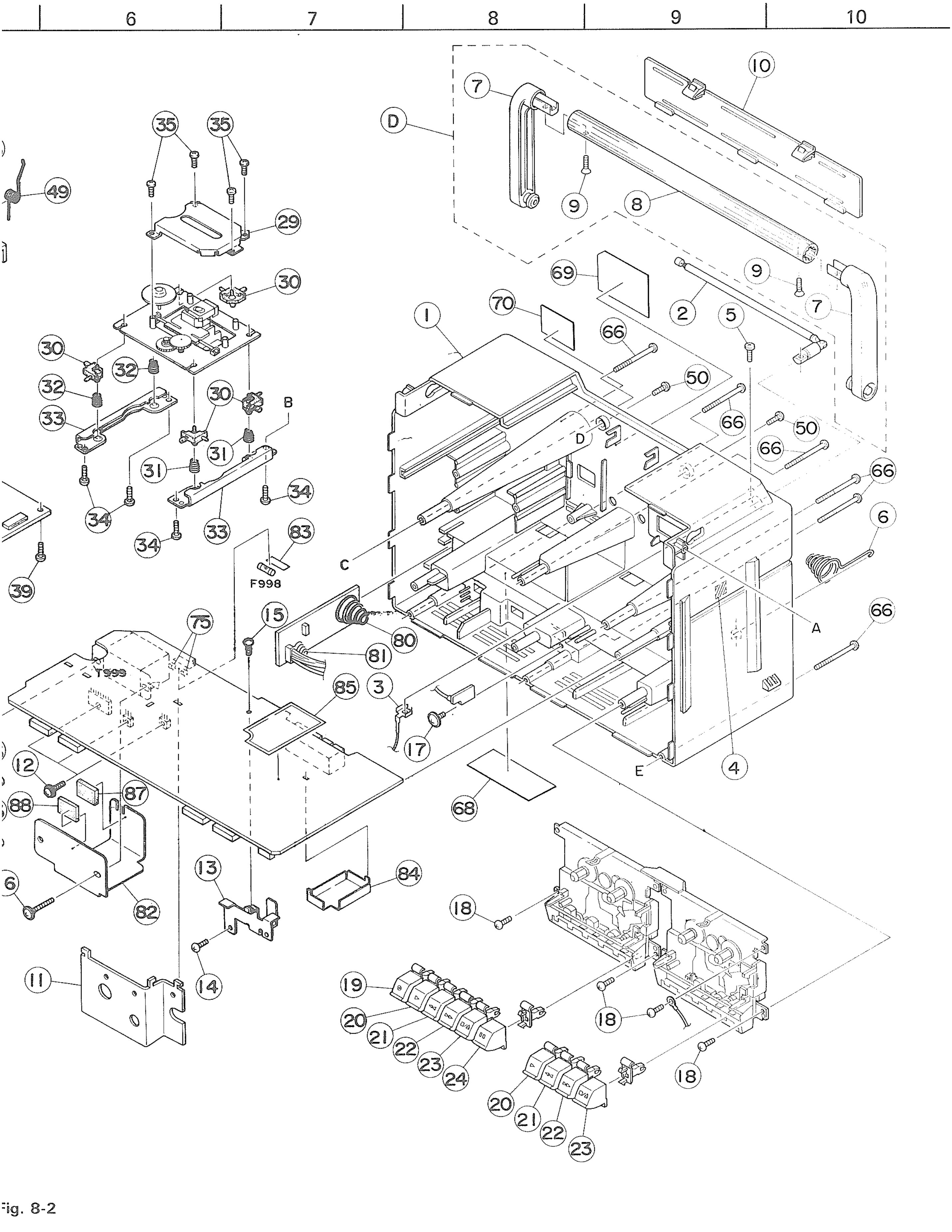


Fig. 8-


D
B
D
C
F998
A
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ig. 8-2

■ Enclosure Assembly Parts List

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	ZCPRX105K-CBA	CASSTTE CASE	REF.55-57	1		
	B	ZCPRX105K-CBB	CASSETTE CASE	REF.57,60,61	1		
	C	ZCPRX105J-FB	FRONT CABINET	REF.51-53	1		
	D	PCX130K-HANDLE	HANDLE	REF.7,8	1		
	1	FSJC1003-006UL	REAR CABINET		1	C	
		FSJC1003-005UL	REAR CABINET		1	J	
	2	FMJA3001-00A(D)	ROD ANT ASSY		1		
	3	VYH5012-005SS	TERMINAL LUG		1		
	4	VYSH101-009	SPACER		1		
	5	SDSP3012N	SCREW	ROD ANT+REAR	1		
	6	VYH5657-001	BATTERY SPRING	SP02	1		
	7	VJH3061-002	HANDLE HOLDER		2		
	8	VJH4093-117SS	HANDLE PIPE		1		
	9	SHSF3012N	SCREW	HANDLE PIPE	2		
	10	VJC2016-023SS	BATT COVER		1		
	11	FMYH3001-001	HEAT SINK		1		
	12	DPSP3010Z	SCREW	P.TRANSISTOR	3		
	13	FSKL4003-002	AC BRACKET		1		
	14	SBSF3012Z	TAP.SCREW	AC BKT+REAR CAB	1		
	15	SBST3006Z	TAP.SCREW	AC BKT + AMP PW	1		
	16	GBSF4020Z	SCREW	P.TRANS+REAR CA	2		
	17	GBSF3008Z	TAP.SCREW	FOR BATTERY PWB	1		
	18	SBSF3012Z	TAP.SCREW	MECHA+REAR CABI	4		
	19	VXP3348-201	BUTTON	A/REC	1		
	20	VXP3348-203	BUTTON	A,B/PLAY	2		
	21	VXP3348-204	BUTTON	A,B/REW	2		
	22	VXP3348-205	BUTTON	A,B/FF	2		
	23	VXP3348-206	BUTTON	A,B/STOP	2		
	24	VXP3348-207	BUTTON	A/PAUSE	1		
	25	FSJD1002-001	CD CASE		1		
	26	VKS5416-001	LOCK ARM		1		
	27	VXP5160-003	CD EJECT BUTTON		1		
	28	VYH4769-002	GEAR		1		
	29	VJD5410-204	PICK COVER	FOR CD MECHA	1		
	30	VYH6596-201	CD CUSHION	FOR CD MECHA	4		
	31	VKW4693-101	CONICAL SPRING	FOR CD MECHA	2		
	32	VKW4693-102	CONICAL SPRING	FOR CD MECHA	2		
	33	VKL7209-002	CD MECHA HOLDER		2		
	34	SBSF3012Z	TAP.SCREW	CD ASS'Y	4		
	35	SDSF2006M	SCREW	CD MECHA	4		
	36	VJD5443-002	LED LENS		1		
	37	VKS5472-002	LENS HOLDER		1		
	38	FSYH4006-001	LCD HOLDER		1		
	39	SBSF3012Z	TAP.SCREW	CD AMP PWB +CD	3		
	40	GBSF3010Z	TAP.SCREW		1		
	41	SBSF3012Z	TAP.SCREW	CONT.PWB+CD CAS	6		
	43	FSJT1001-002	CD DOOR		1		
	44	FSJD4003-004	CD LENS		1		
	45	VYH3644-201	CLAMPER	FOR CD DOOR	1		
	46	E74897-002	C.D. MAGNET	FOR CD DOOR	1		
	47	VYH7314-001	YOKE	FOR CD DOOR	1		
	48	VYH7315-004	PAD	FOR CD DOOR	1		
	49	VKW5034-001	CD DOOR SPRING		1		
	50	SBSF3014Z	SCREW	CD CASE+REAR CA	2		
	51	FSJC1005-006UL	FRONT CABINET		1		

BLOCK NO. M2MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	52	FSJD3001-007	LCD LENS		1		
	53	FSJD3002-003	CONTROL PLATE		1		
	55	FSJT2002-007	CASSETTE DOOR(A		1		
	56	FSJT3001-007	CASSETTE LENS		1		
	57	VKY4180-001	CASSETTE SPRING		2		
		VKY4180-001	CASSETTE SPRING		2		
	58	VYH5601-001	GEAR		1		
		VYH5601-001	GEAR		1		
	59	FSKW4001-001	DOOR SPRING		1		
		FSKW4001-001	DOOR SPRING		1		
	60	FSJT2002-004	CASSETTE DOOR(B		1		
	61	FSJT3001-008	CASSETTE LENS	B SIDE L	1		
	62	FMXP3001-001	CD BUTTON		1		
	63	SBSF2608Z	TAP.SCREW		2		
		SBSF2608Z	TAP.SCREW	FOR VOLUME KNOB	2		
		SBSF2608Z	TAP.SCREW	FOR TUNER BUTTO	2		
	64	FMXP3002-001	TUNER BUTTON		1		
	65	FSXP3003-105	VOLUME KNOB		1		
	66	SBSF3050Z	SCREW	F.CABINET+R.CAB	6		
	67	SSSF3010M	T SCREW	F.CABINET+R.CAB	2		
	68	VND5001-007	HHS LABEL		1	J	
		T44362-001	CSA LABEL		1	C	
	69	FMYN7002-004T	NAME PLATE		1	C	
		FMYN7002-006T	NAME PLATE		1	J	
	70	VND5008-001	FCC LABEL(4)		1	J	
	75	VMZ0125-001Z	FUSE CLIP	FOR F996	2	C	
		VMZ0125-001Z	FUSE CLIP	SECONDARY F998	2		
	80	VYH5483-001	SPRING	SP01	1		
	81	VYH6889-002	BATT SPRING	SP03	1		
	82	FSYH4017-002	SHIELD		1		
	84	VMA4482-002SS	SHIELD CASE		1		
	85	VMA4572-002	SHIELD		1		
	87	FSSH4001-003	SPACER		1		
	88	FSSH4001-002	SPACER		1		
	CN991	TTL25V-003	CONNECTOR		1		
⚠	F 996	QMF0007-5R0J1	FUSE	BATTERY PCB	1	C	
⚠	F 998	QMF0007-5R0J1	FUSE		1		
⚠	T 999	FMTP57A2-12A	POWER TRANS		1		

■ Analytic Drawing of CD Mechanism : Block No. M 4

Greasing specifications by application point (a, b, C)
a : Grease No. G – 31KB
(Apply 0.3 mm 3 to the hole.)
b : Grease No. G – 31KB
(Apply the sliding part of the pickup unit.)
c : Grease No. G – 31KB
(Apply 0.4 mm 3 to the shaft after assembling the pickup unit.)
☆ Apply locktight #460 or equivalent after installation of ⑦.

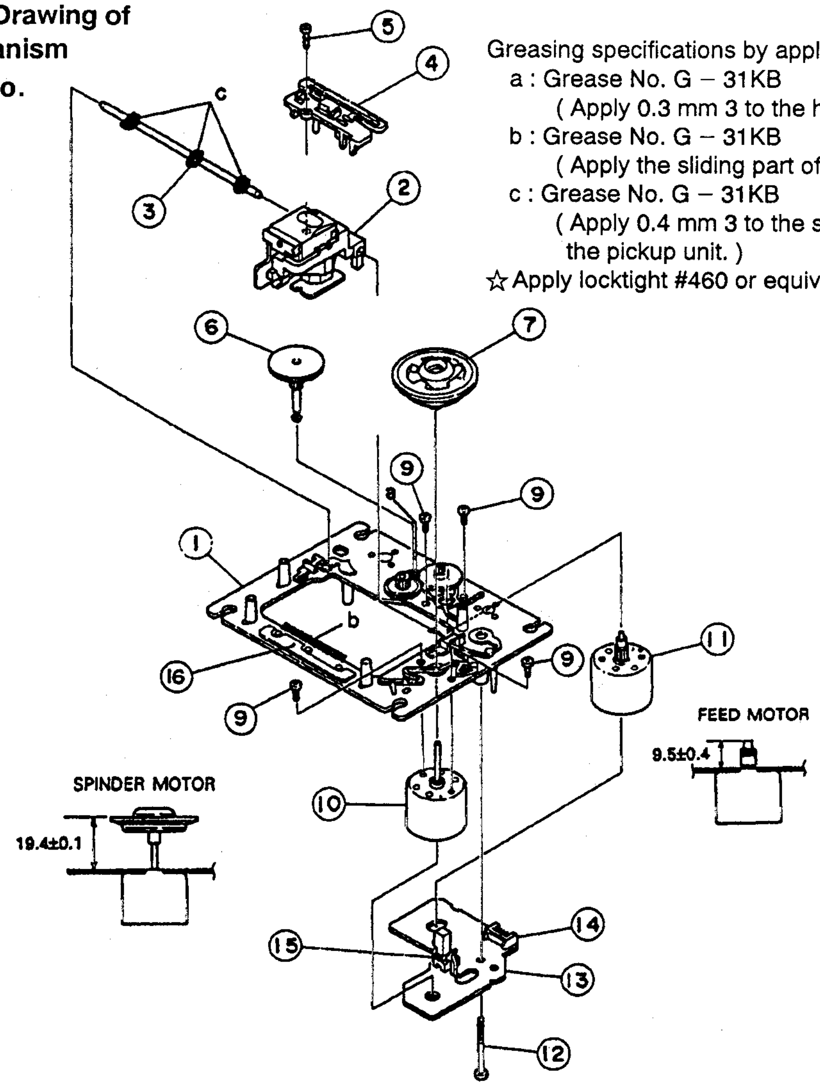


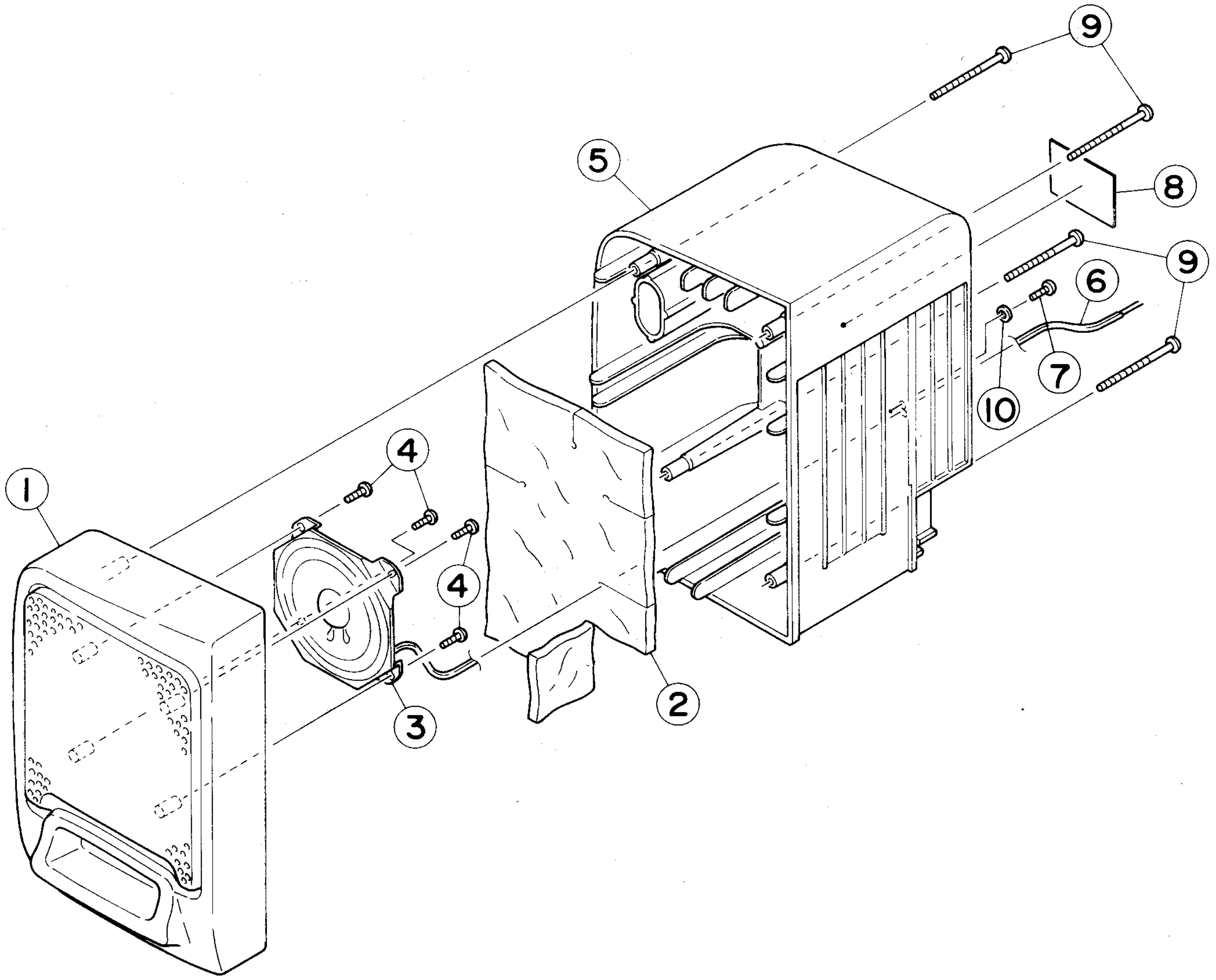
Fig. 8-4

■ CD Mechanism Assembly Parts List

BLOCK NO. M3MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	EPB-002A	MECHA BASE ASSY		1		
	2	OPTIMA-6S	CD PICKUP UNIT		1		
	3	E406777-001	C.D SHAFT		1		
	4	E307746-001	C.D RACK		1		
	6	EPB-003A	MECHA GEAR		1		
	7	E75807-301	C.D T.TABLE ASS		1		
	9	SDSP2003N	SCREW	SPENDLE MOTOR	2		
		SDSP2003N	SCREW	FEED MOTOR	2		
	10	E406783-001	SPENDLE MOTOR		1		
	11	E406784-001SA	FEED MOTOR	WITH PINION	1		
	12	E75832-001	SPECIAL SCREW		1		
	13	EMW10190-001	MECHA CIR BOARD		1		
	15	ESB1100-005	LEAF SW		1		

■ Speaker Box Assembly Section: M 4



■ Speaker Box Assembly Parts List

BLOCK NO. M4MM☐☐☐

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	VJC2504-00A	SPEAKER PANEL	RIGHT	1		
		VJC2503-00A	SPEAKER PANEL	LEFT	1		
	2	VKZ4687-001	SOUND ABSOBER		1		
	3	VGS1001-022	SPEAKER UNIT		1		
	4	SBSF3010Z	TAP.SCREW	SPEAKER + FRONT	4		
	5	VJG1112-002	REAR CABINET	LEFT	1		
		VJG1114-002	REAR CABINET	RIGHT	1		
	6	VMP0040-002T	SPK CORD		1		
	7	SBSF3008M	SCREW	FOR SPK CORD ST	1		
	8	FMYN7002-001B	NAME PLATE	FOR REAR CABINE	1		
	9	SBSF3050Z	SCREW	FRONT + REAR	4		
	10	VYSS2R7-006	SPACER	FOR SPK CORD ST	1		

9. Main Adjustments

■ Test Instruments reqired for adjustment

1. Low frequency oscillator
   (oscillation frequency: 50Hz to 20kHz)
   (Output : 0 dBs with 60 Ω terminator)
2. Attenuator(Impedance : 600 Ω)
3. Test Tapes
   VTT703L··························Head azimuth(10kHz)
   VTT712 ··············· Tape speed & wow flutter(3kHz)
   VTT739 ············ Playback output level & frequency response (1kHz)
4. Electronic voltmeter
5. Resistor...600 Ω for attenuator matching
6. Distortion meter
7. Torque gauge ············ Cassette type for CTG − N mechanism adjustment
8. Wow and Flutter meter
9. Frequency counter
10. Test tape for REC/PB ····Normal tape : UR(TMT7088)

■ Measuring conditions (Amplifier section)

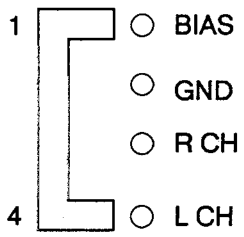
Sopply voltage:·········· AC 120V(60Hz)
Battery DC : 12V
Back up battery : 4.5V

Reference output : Speaker ······· 0 dBs (0.775V) / 3 Ω
: Headphone ···· 0dBs(0.775V)/ 32 Ω

● Standard position of functionswitches

Function switch ·· TAPE
Tape select switch·································NORMAL
Multi − bass horn ······································OFF
BASS/TREBKE ································· CENTER
Volume level··· 13
Mode switch ····································· STEREO
Reference input level······Test point CN301 : − 18 dBs
For REC/PB, Check &measuring input use
CN301 ················ − 18.0 dBs (Component side)

CN301: Connector



Output for measuring unless otherwise specified
At headphone J301 with dummy load 32 Ω
BIAS ocillation frequency ·····101.0kHz ± 150Hz at FM
(The tape select switch to NORMAL.)

Standard frequency for alignment and measurement as a general specification is 1 kHz, but unless otherwise specified.

Note : When measuring at headphone output, sound from speaker output should be automatically cut off.

■ Measuring condition (Radio section)

Reference output ·······Speaker : 20mW(0.245V) / 3 Ω
AM frequency ······················400Hz modulation 30%
FM frequency ····························400Hz modulation
frequency deviation 22.5kHz

● Standard position of switches and controllers

Function··RADIO
Mode ······································ STEREO
Equalizer frequency ······················ CENTER
Multi bass horn ·································· OFF

● Careful points for adjustment

1. Connect 30 pF capacitor and 33 k Ω resistor to the output side of the IF sweeper in series while 0.082 μ F capacitor and 1000k Ω resistor to the input side in series.
2. Set output level of the IF sweeper as minimum as adjustable.

■ Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape :VTT703L (10 kHz) Test point :Headphone (Dummy load 32 Ω)	Play test tape VTT703L(10kHz) and adjust the head azimuth so that output level is maximum and phase discrepancy is minimum between the two channels.	Output :maximum Phase difference :minimum	Head adjusting screw
Tape speed adjustment	Test tape : VTT712(3kHz) Test point : Headphone (Dummy load 32 Ω)	Play test tape VTT712 (3kHz) and near the end posiition. Should the following tape speed is out of specification, it is necessary to adjust the speed controller (external /semiifixed resistor).	Normal speed : 3010^{+80}_{-70}Hz High speed : 5400 ± 400 Hz	VRA61
Wow and flutter check	Test tape :VTT712(3kHz) Test point :Headphone (Dummy load 32 Ω)	Play test tape VTT712(3kHz) to tape start, middle and end position. Wow and flutter should be within the following allowance at the three positions.	Playback should be Within 0.4% (JIS RMS)	–
Playback output level check	Test tape :VTT739(1kHz) Test point : Speaker out (Dummy load 3 Ω)	1. Play test tape VTT739(1kHz) and switch the tape select to Metal position. The playback output level should be within – 3 ± 3 dB. 2. L, R difference level to be within ±3dB.	Within – 3 ± 3dB Within ±3dB	–
Playback Frequency response check	Test tape :VTT739 (1kHz//10kHz) Test point : Speaker out (Dummy load 3 Ω)	Switch tape select to Normal position and volume at maximum level of 25 position. Play test tape VTT739 then compare the level between 1 kHz and 10 kHz. Then defference level should be within 0dB ± 3 dB.	Difference of 10 kHz level from 1 kHz level : within 0 ± 3dB	–

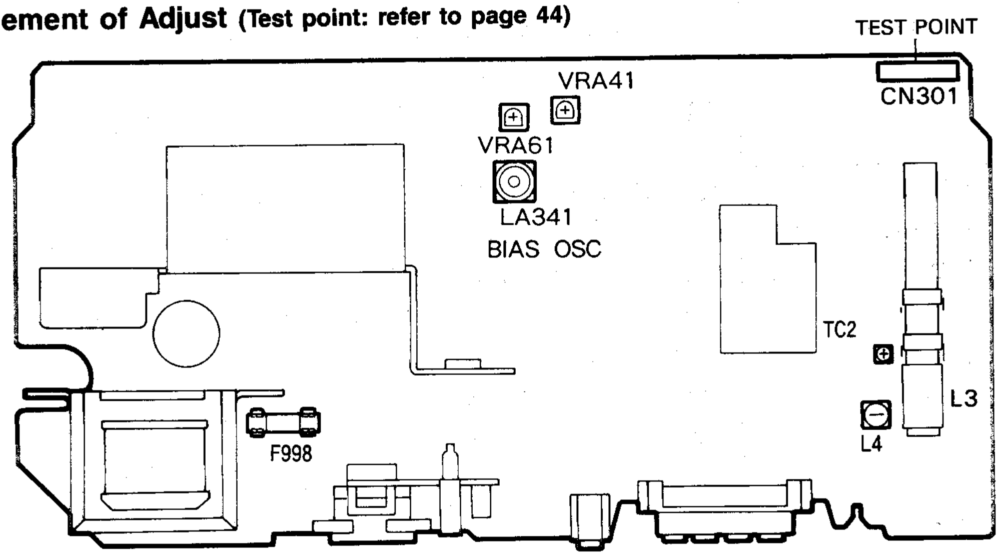
<table>
<tr><th>Item</th><th>Conditions</th><th>Adjustment & Confirmation Methods</th><th>Stand. values</th><th>Adjust</th></tr>
<tr><td>Bias frequency adjustment</td><td>• Adjust : FM mode
•Confirm : AM mode
Test point :CN301</td><td>Switch tape select to Normal position. In case that the bias frequency is out of specification, LA341 should be readjust to standard and set to Tuner Confirm bias frequency at mode.
① Adjust bias frequency at FM mode.
② Confirm bias frequency at mode.
<table>
<tr><th>Tuner Frequency</th><th>Bias Frequency</th><th>Tolerance</th><th>Confirmation</th></tr>
<tr><td>FM</td><td>101.0kHz</td><td>± 150Hz</td><td>–</td></tr>
<tr><td>AM530(M1)</td><td>97.6kHz</td><td>–</td><td>± 500Hz</td></tr>
<tr><td>AM570</td><td>101.0kHz</td><td>–</td><td>± 500Hz</td></tr>
<tr><td>AM600(M3)</td><td>93.7kHz</td><td>–</td><td>± 500Hz</td></tr>
</table></td><td>Tuner frequency :FM / Bias frequency ; 101.0kHz
: AM530(M1) /Bias frequency ; 97.2kHz</td><td>LA341</td></tr>
<tr><td>Recording /playback frequency response check and adjustment</td><td>Test tape : UR(Normal tape)
Test point : Speaker out (Dummy load 3 Ω)</td><td>Select function to tape mode and volume at level 25 position. Reference level of – 20 dB, (1 kHz and 10 kHz) perform the REC/PB function. Play back the recorded signals, adjust VR41, so that the level of the 10 kHz signal is 0dB ± 3 dB to the level of the 1 kHz signal.</td><td>10 kHz : 0 ± 3dB</td><td>VR41</td></tr>
<tr><td>Recording / playback sensitivity</td><td>Test point : Speaker out (Dummy load 3 Ω)</td><td>Turn NR switch to OFF, tape select switch to Normal position and Beat cut switch to Normal position 1 or Normal.
Record the standard level (REF.) reduced – 20dB, 1kHz.
Adjust VR41 so that test point output level to same level in play and record mode.</td><td>Playback /record : same output level</td><td>VR41</td></tr>
</table>

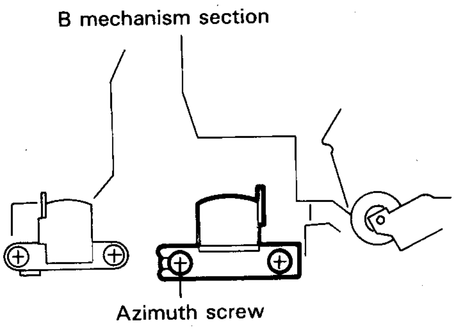
■ Tuner Section

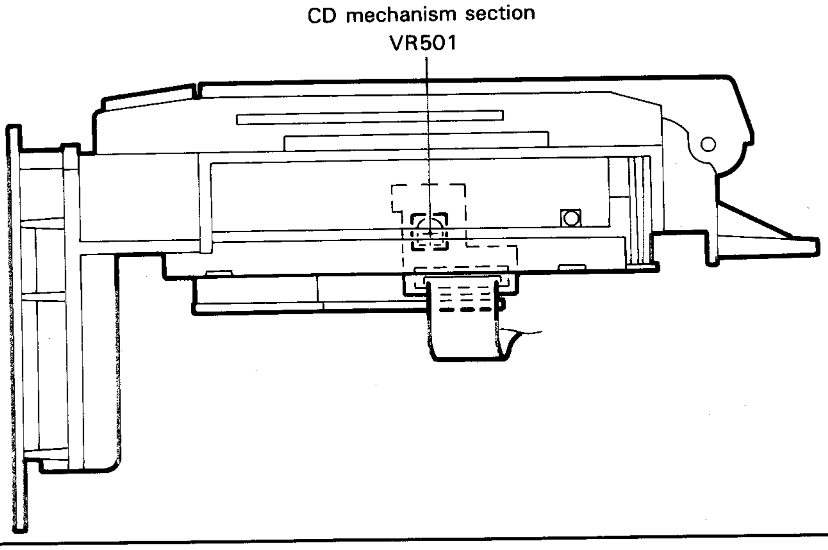
Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
AM RF tracking check	Band select : AM Input position : Standard loop antenna Measuring point: HOT : TP1 Earth: TP2	1. Receive 530 kHz signal (preset No. 1) from an AM oscillator. 2. Receive 1710 kHz signal (preset No. 2) from an AM oscillator. Adjust L4 to obtain 4.8 V ± 0.02 at TP9 is not within the specified voltage. 3. Next, receive 600 kHz signal (preset No. 3) while adjusting L3 to maximize headphone output. 4. Next, receive 1500 kHz signal (preset No. 4) while adjusting TC2 to maximize headphone output. 5. Repeat the above steps 2. and 3. to obtain maximum outputs respectively.	output level : Maximum 4.8 V±0.02	L4 L3 TC2

★AM IF, FM IF : No alignment is necessary in using the solid IF.

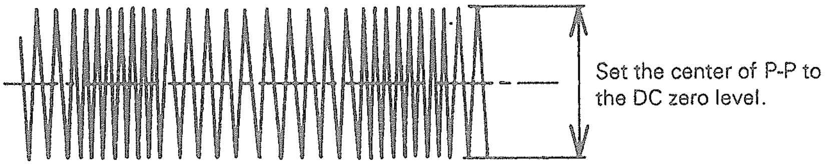
■ Arrangement of Adjust (Test point: refer to page 44)



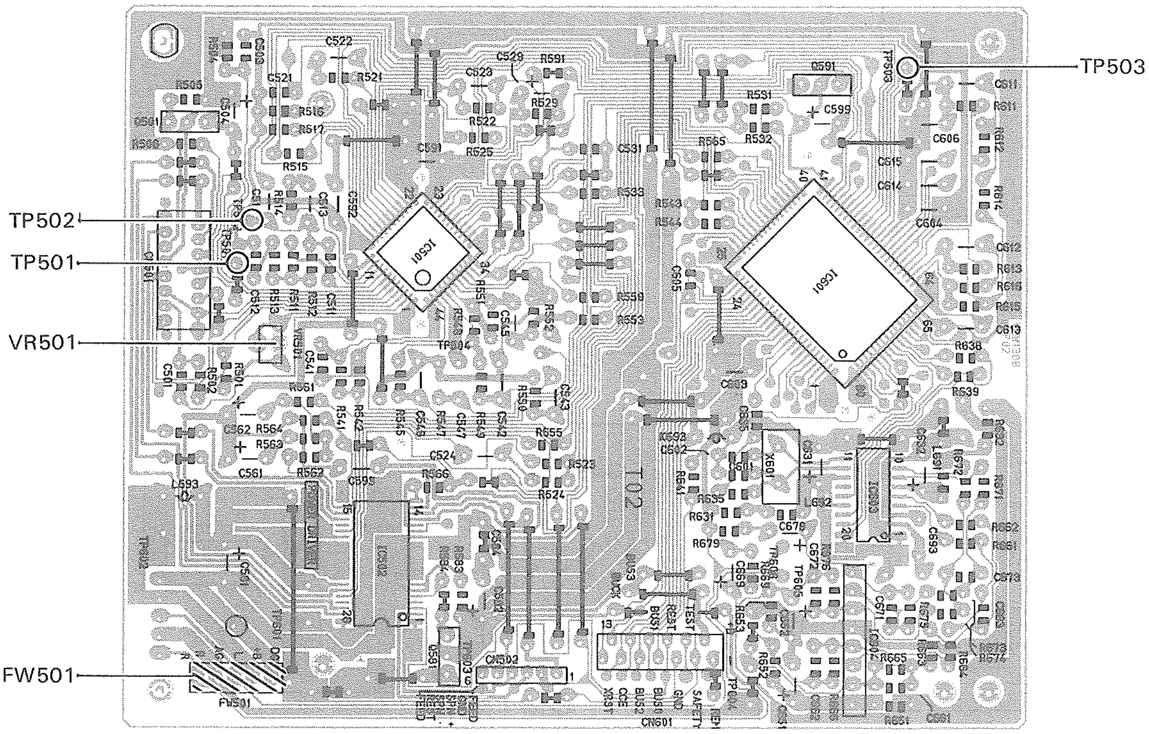




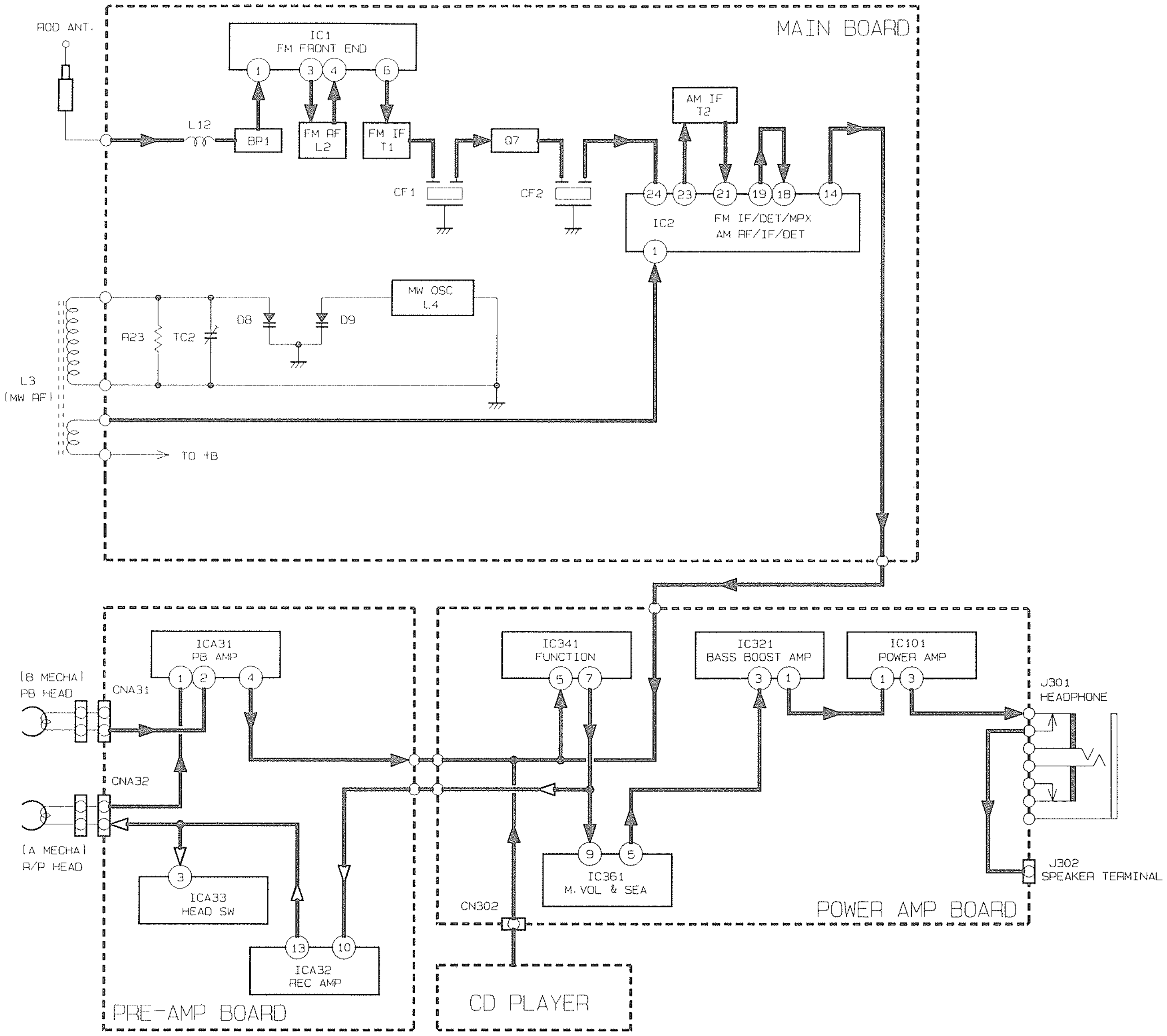
CD player Section

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Tracking offset adjustment	Normal disc :CTS1000 Oscilloscope	1. Connect an oscilloscope between TP503 (Hot side) and TP502 (Earth side). 2. Shortcircuit between pin ② and pin ⑤ of FW501, and supply 8 V to pin ③ . 3. Playback a normal disc. 4. Shortcircuit between TP504 and TP502. 5. Adjust VR501 so that DC level of tracking error signal becomes zero (observed by oscilloscope). Tracking offset waveform  Note : (1) Adjust VR501 so that the waveform is vertically symmetric with respect to the zero level. (2) Input to the oscilloscope should be DC coupling.	Set the center of P − P to the DC zero level.	VR501

Arrangement of adjusting positions : CD amplifier P.C. board



10. Block Diagram



CD player section

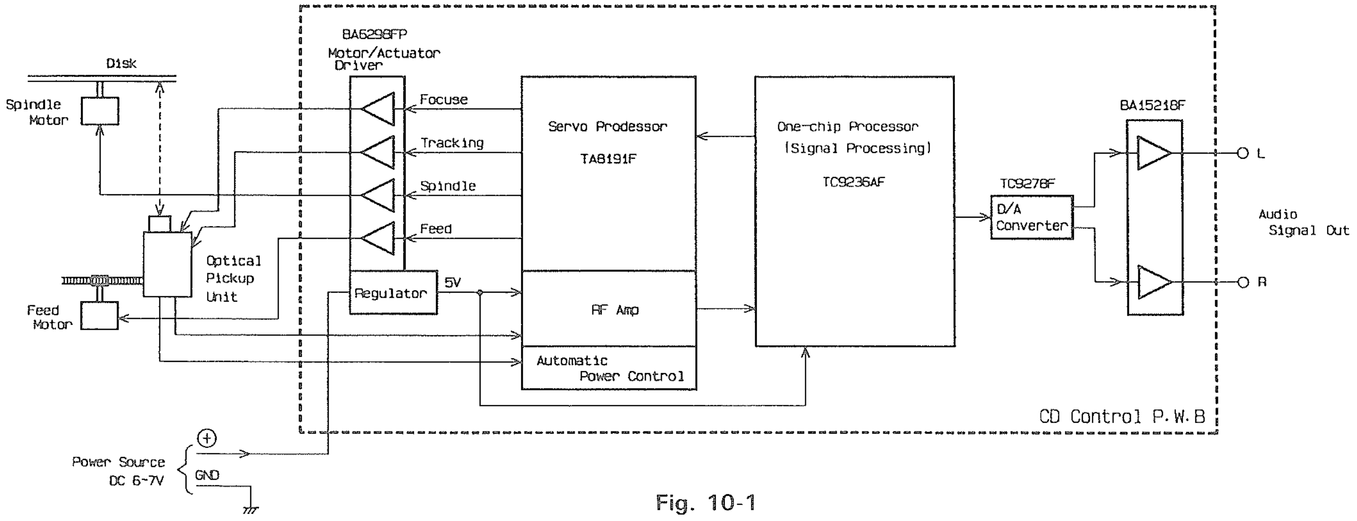
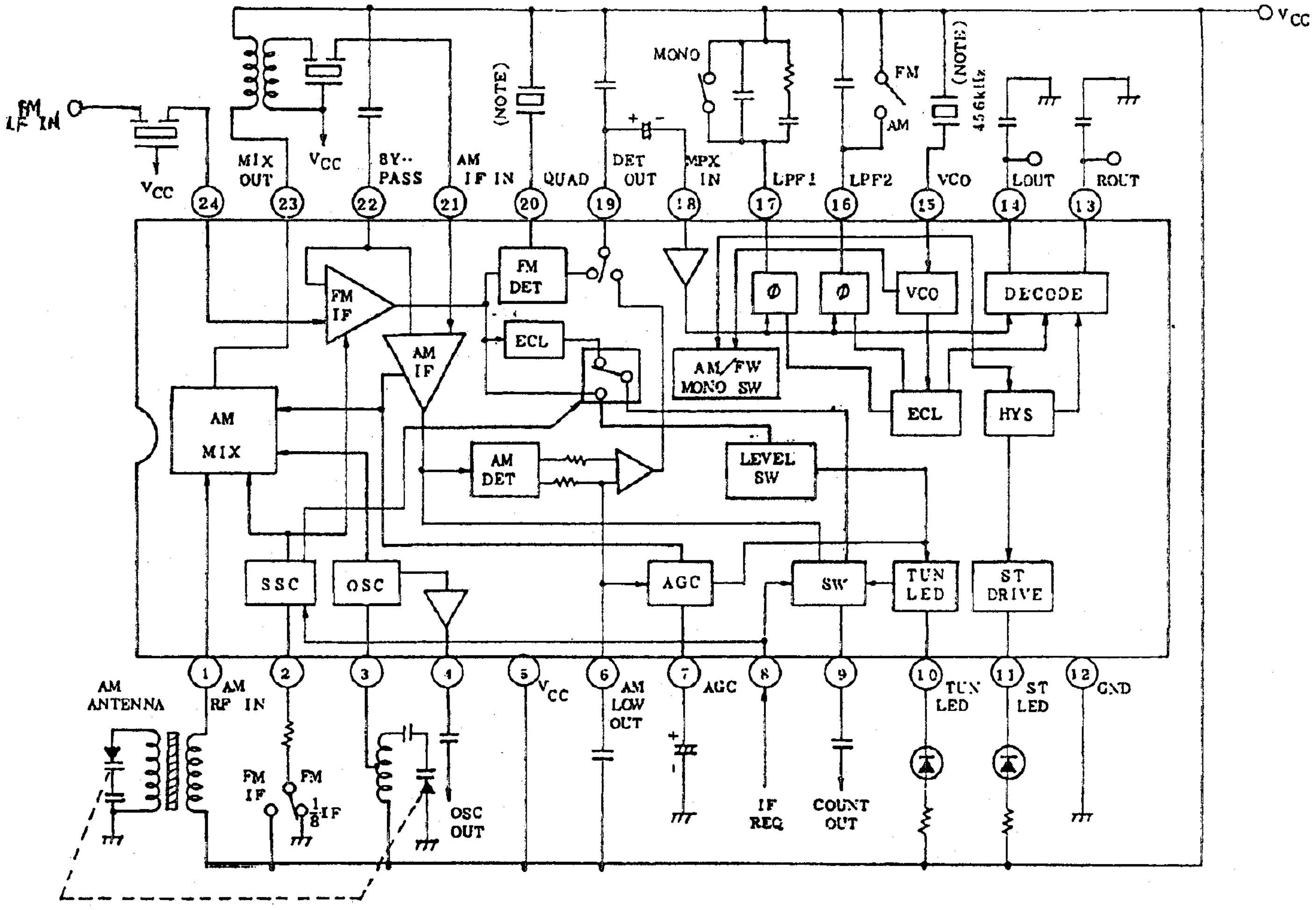


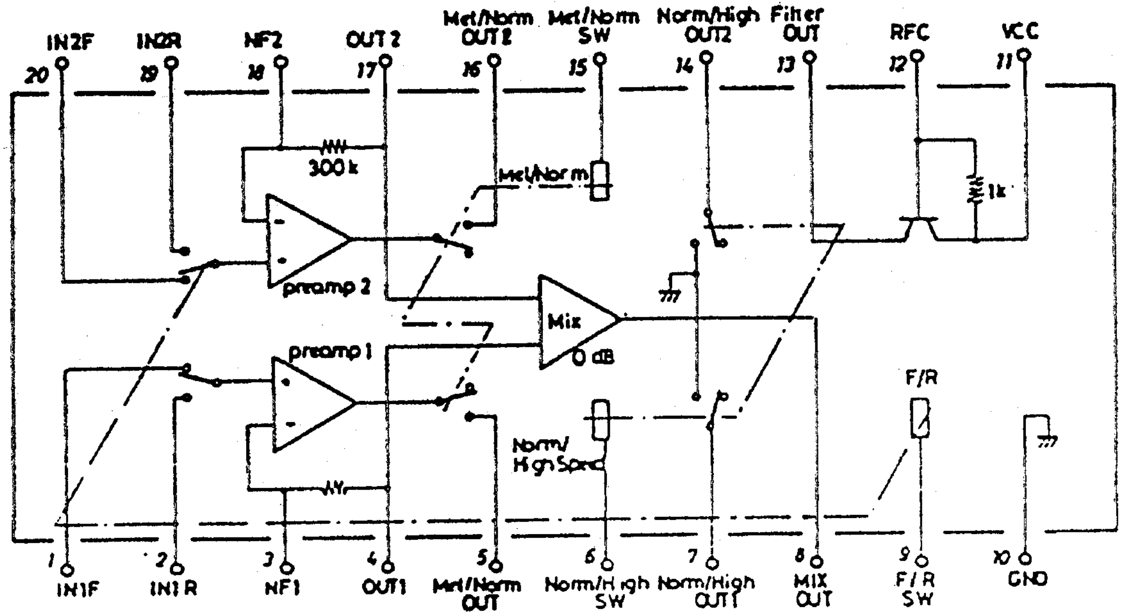
Fig. 10-1

■ IC Block diagram

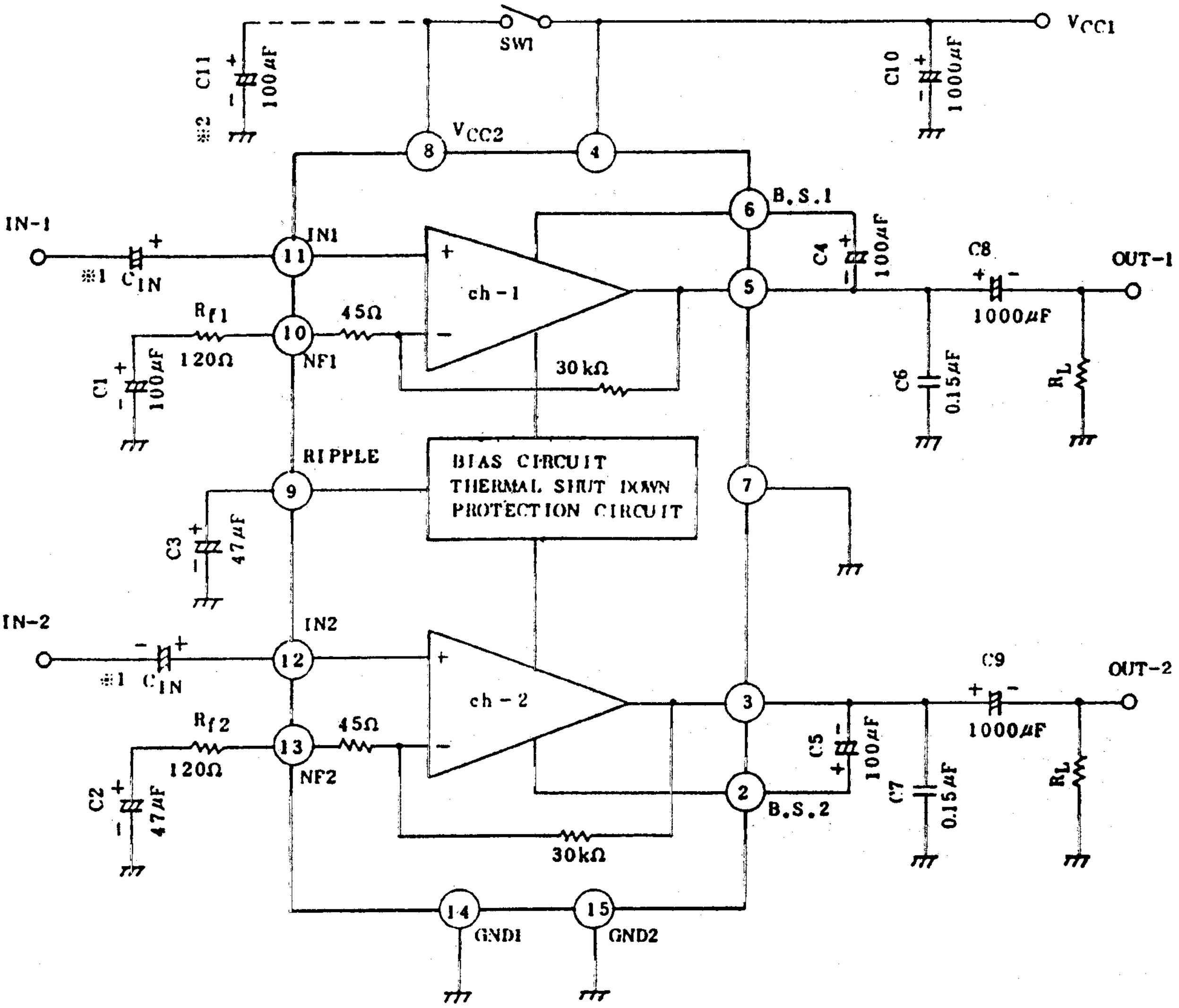
● IC 2 (FM IF / DET / MPX & AM RF / IF / DET) : TA 8132AN



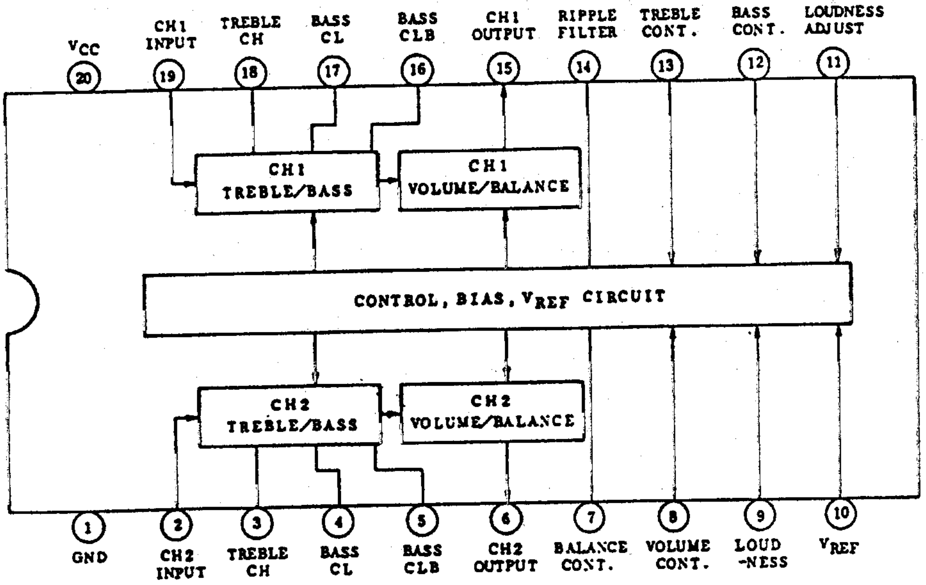
● ICA 31 (PRE AMPLIFIER) : LA3246



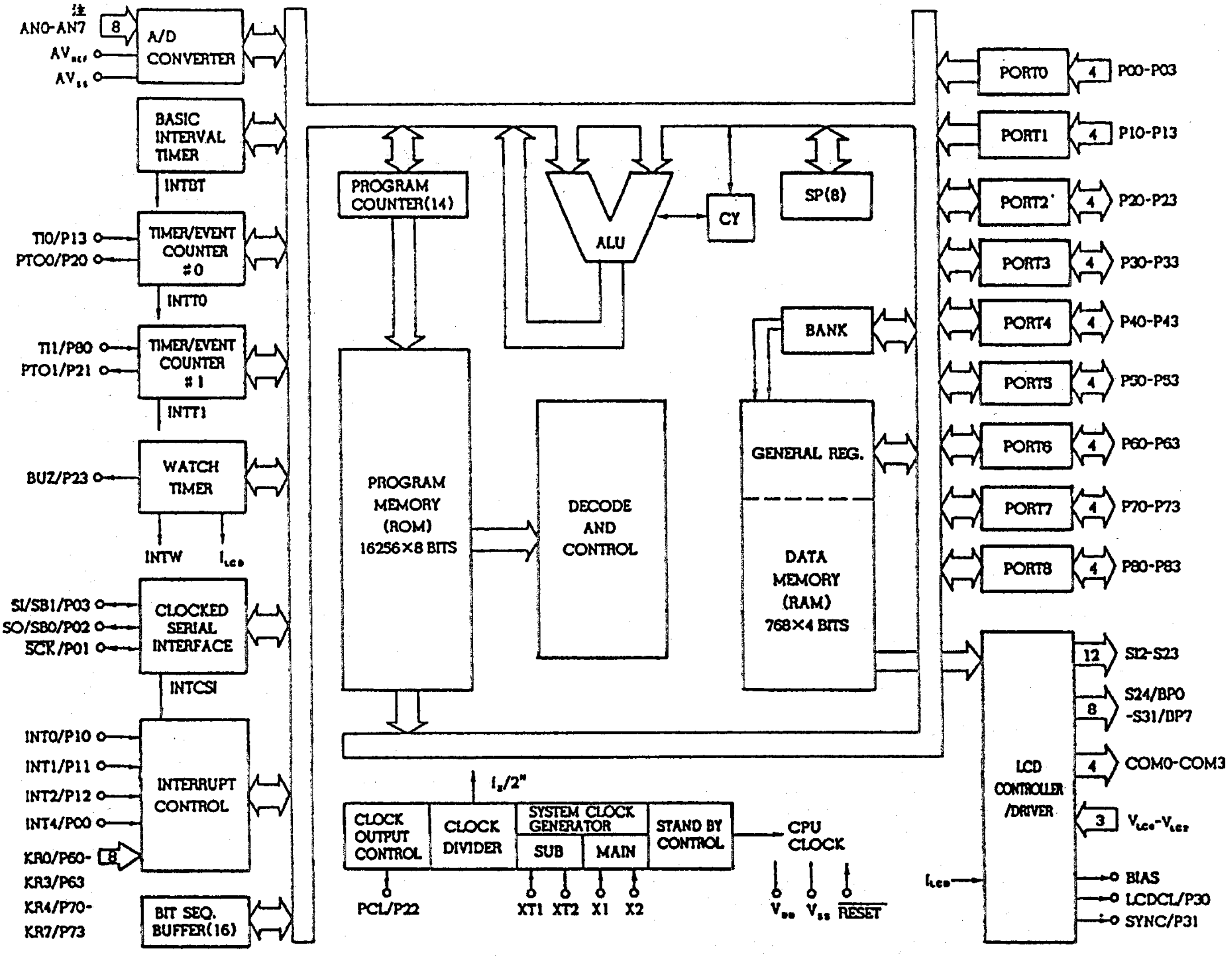
●IC 101 (POWER AMPLIFIER) : TA8229K



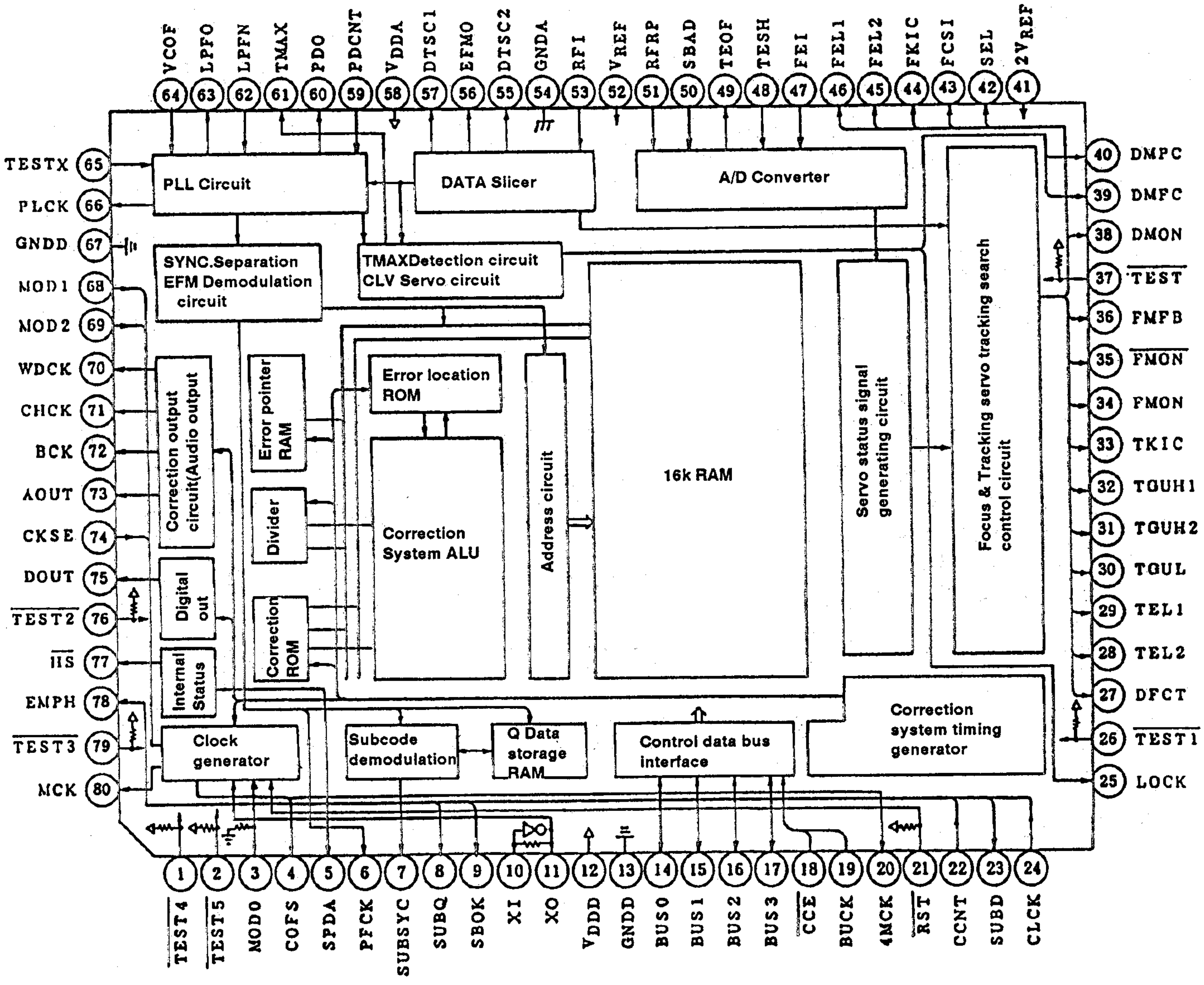
●IC361
(MAIN VOLUME & TONE)
: TA8184P



● IC801 (SYSTEM MICRO COMPUTER) : μ PD75336GC − 073



● IC 601 (1 CHIP PROCESSER) : TC9236AF



11. Wiring Connections

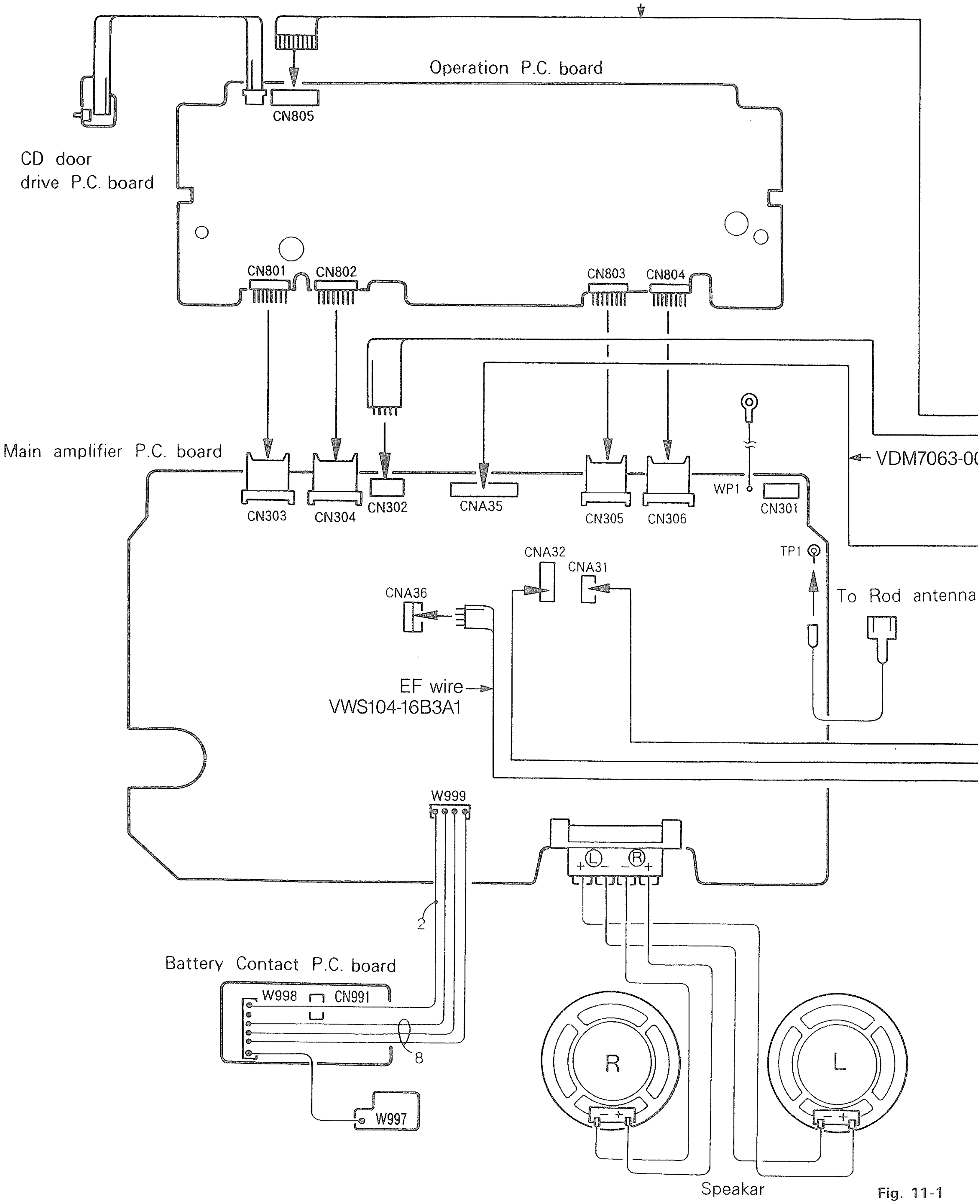
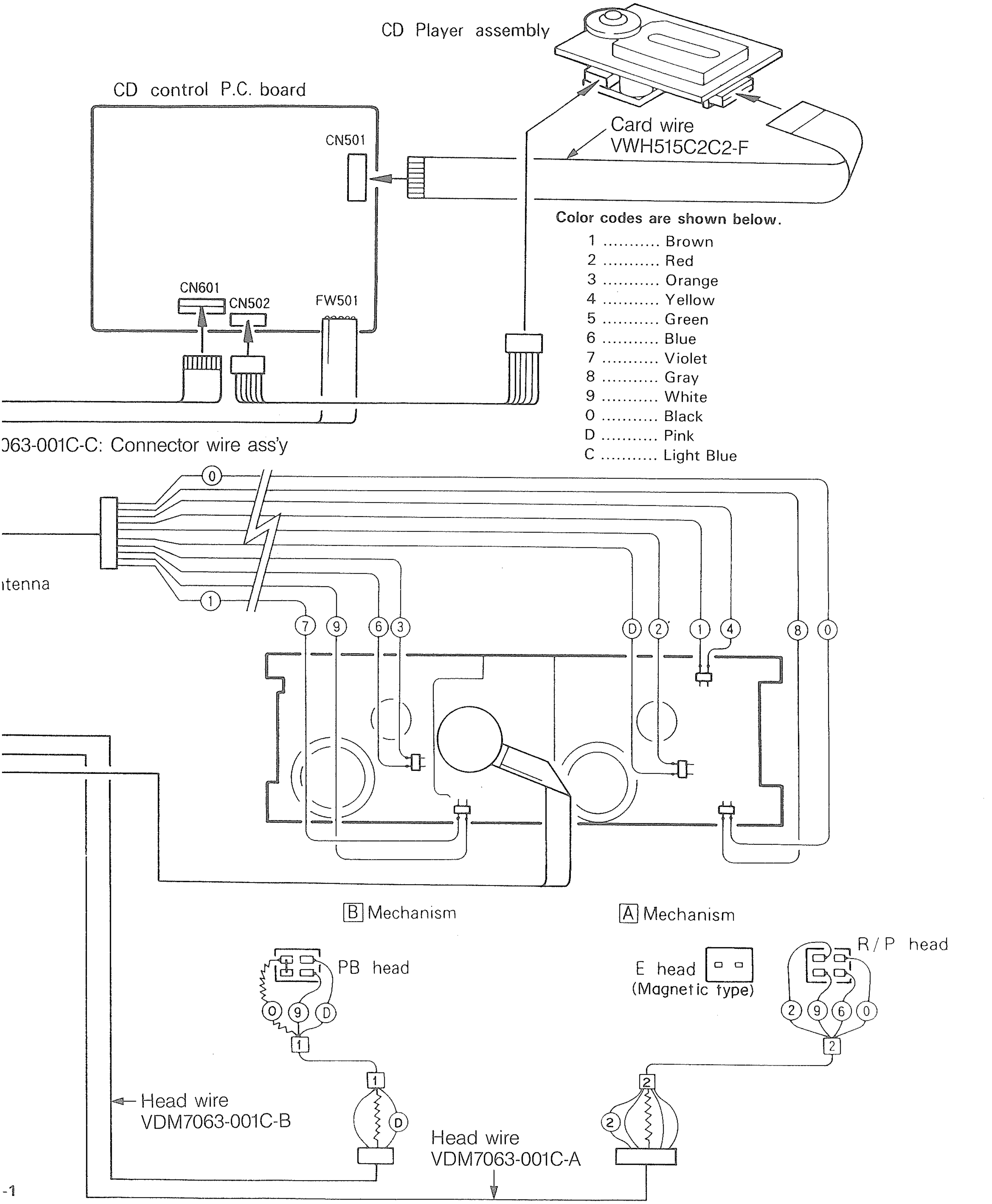


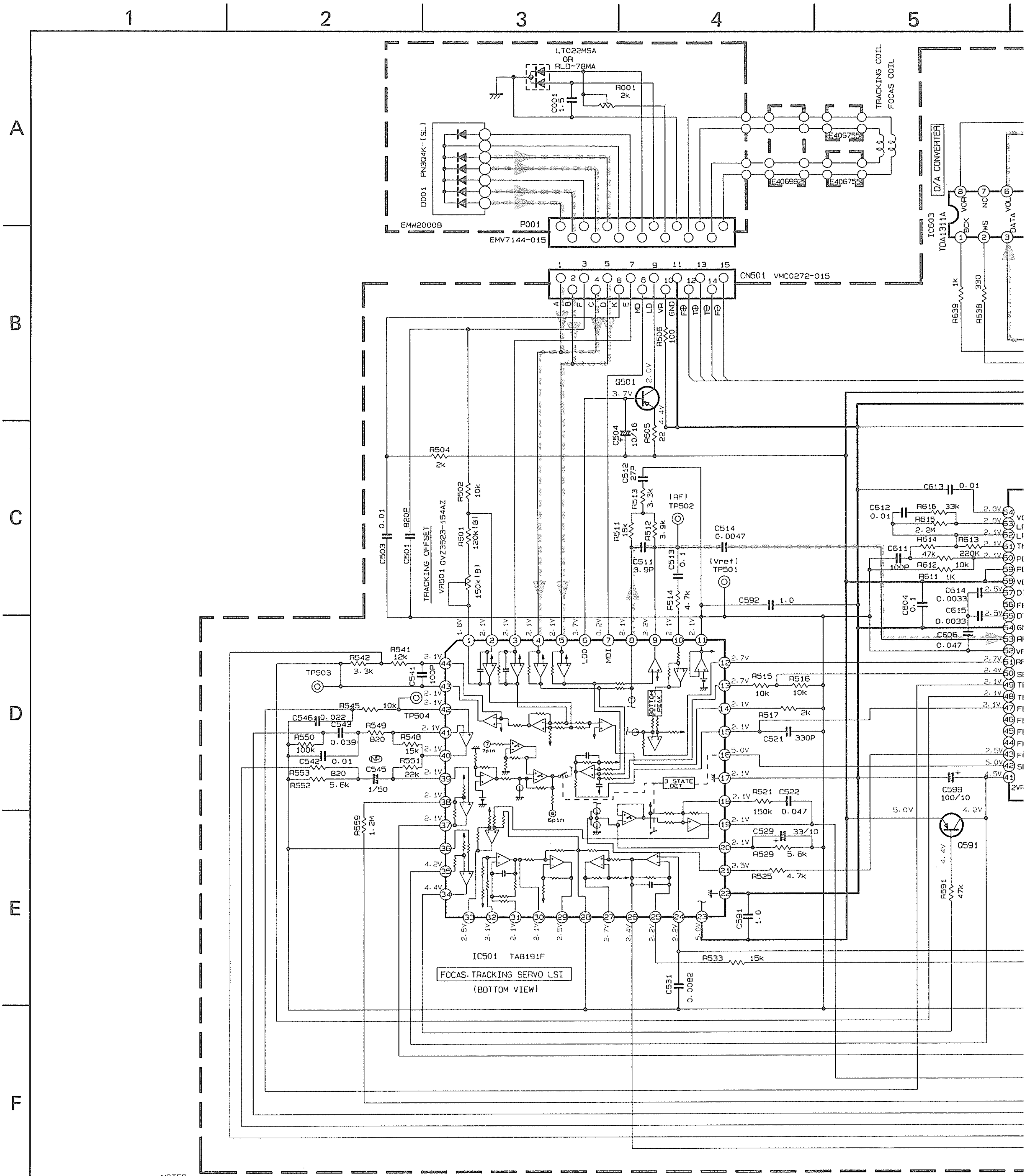
Fig. 11-1



Color codes are shown below.

1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White
0	Black
D	Pink
C	Light Blue

12. Standard Schematic Diagrams ■ CD Amplifier Circuit: Drawing No. FMDH7



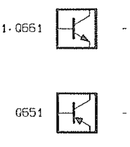
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN PLAYBACK

2. UNLESS OTHERWISE SPECIFIED·RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

(UF) UNFLAMMABLE CARBON RESISTOR
(MF) METAL FILM RESISTOR
(OMF) OXIDE METAL FILM RESISTOR
(LL) ±20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
(NP) NON-POLARISED ELECTROLYTIC CAPACITOR
(PP) POLYPROPYLENE CAPACITOR
(PS) POLYSTYROL CAPACITOR

Q501 Q581	2SA952(L·K)
Q591	2SA1309(R·S) OR 2SA1175(HFE) OR 2SA933S(RS)
Q651	UN4115 OR DTA114TS OR BA1A4Z
Q661 Q671	UN4215 OR DTC114TS OR BN1A4Z



DH7002-001CV

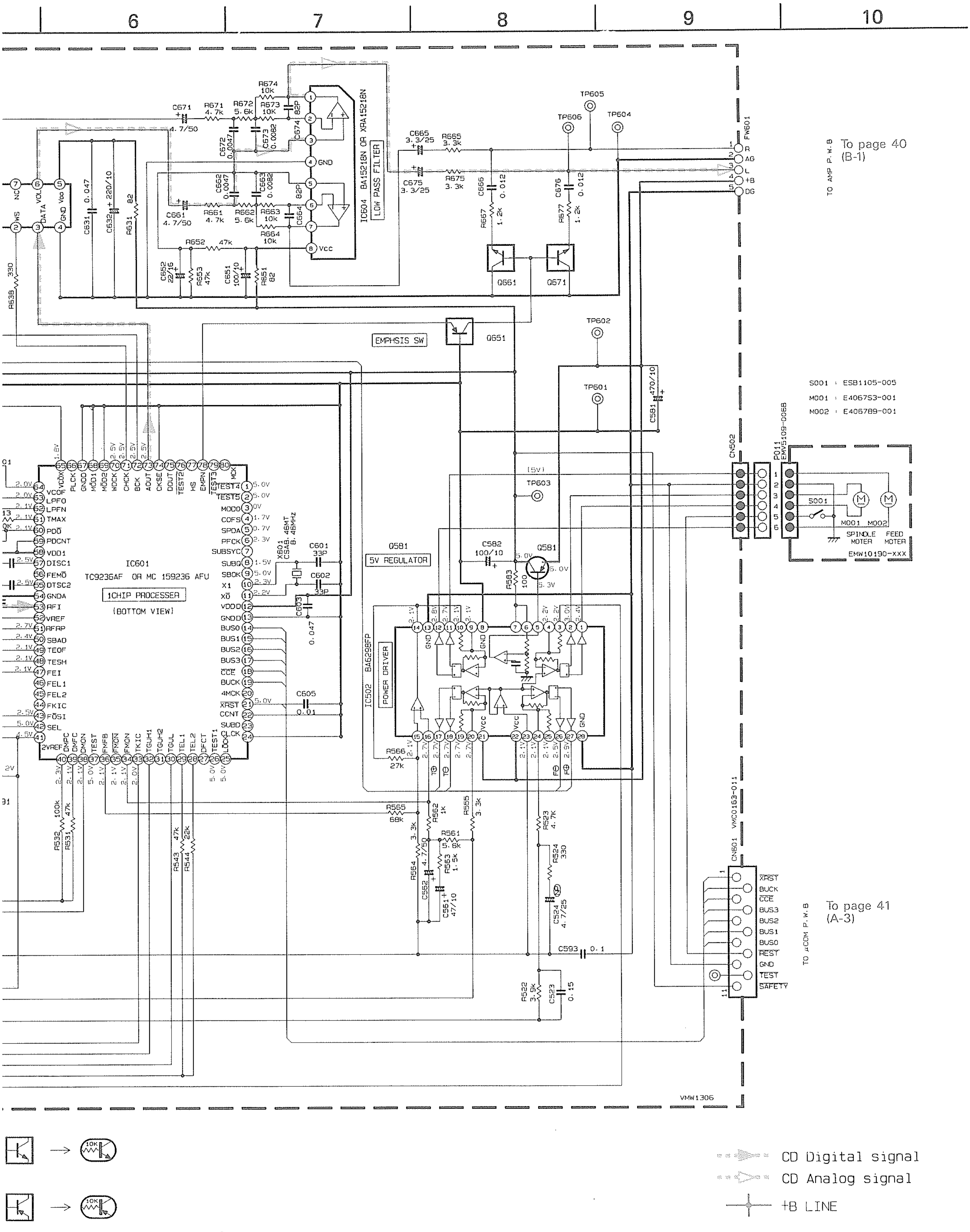
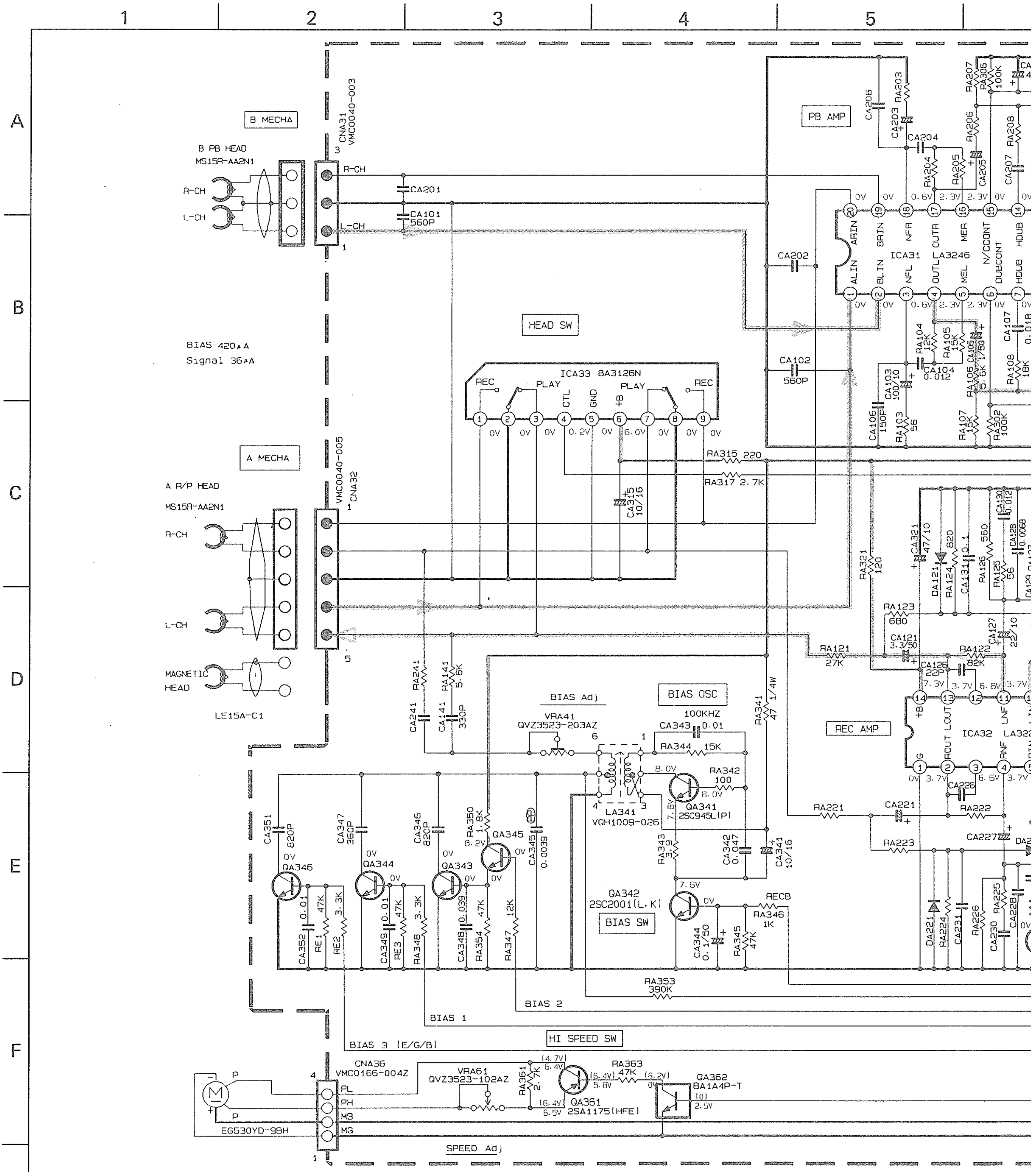


Fig. 12-1

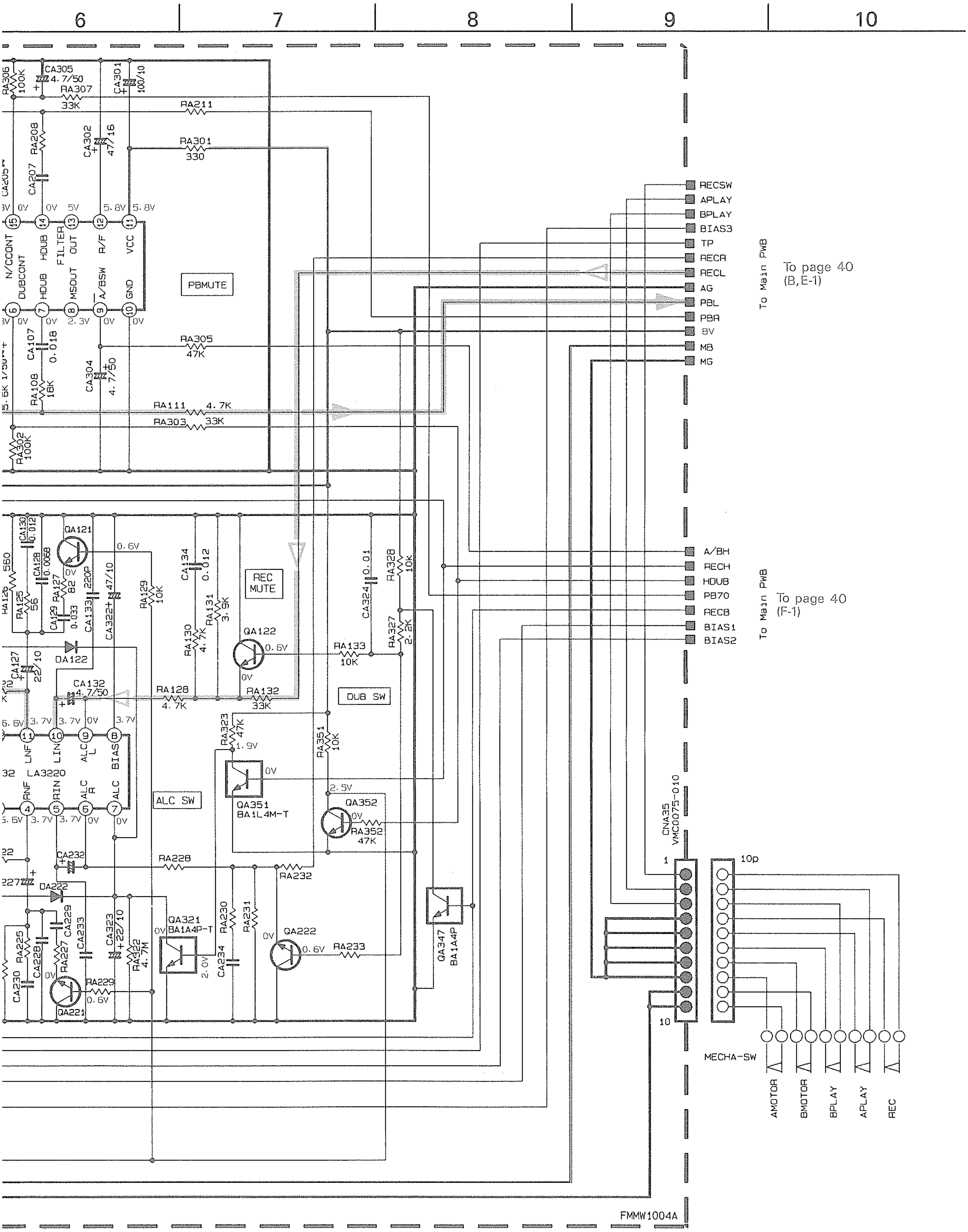
■ Pre-Amplifier Circuit: Drawing No. FMDH7002-001RW



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
   OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION : TAPE MODE A MECHA PB.
   CONDITION : HIGH SPEED REC IN ( )

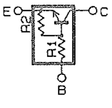
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED
   ALL DIODES ARE 1SS133
   ALL TRANSISTORS ARE 2SC2785(E,F)



RESISTOR.

μF)/RATED VOLTAGE (V).

Fig. 12-2



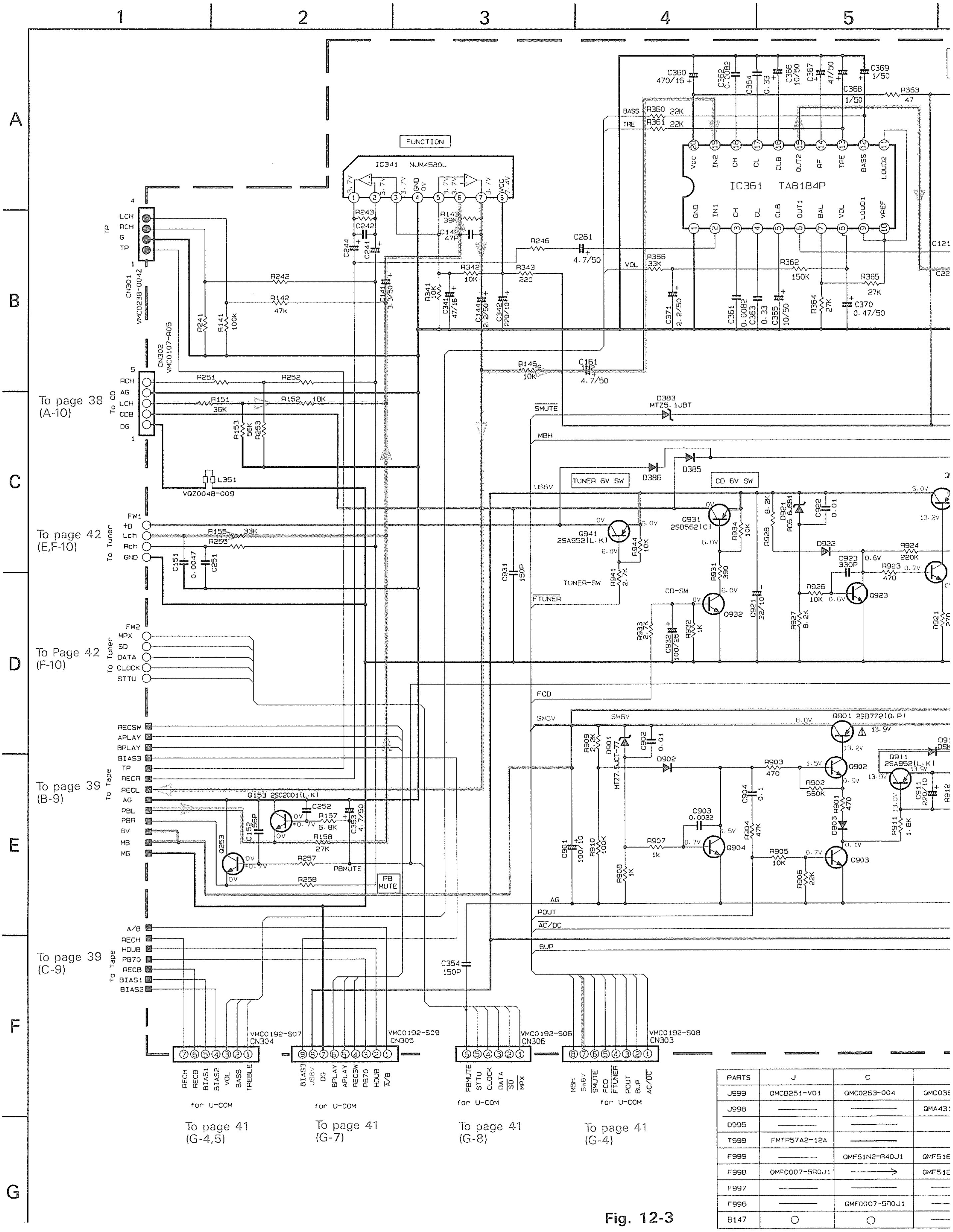
	R1	R2
BA1A4P	10K	47K
BA1L4M	47K	47K

Tape P.B Signal

Recording signal

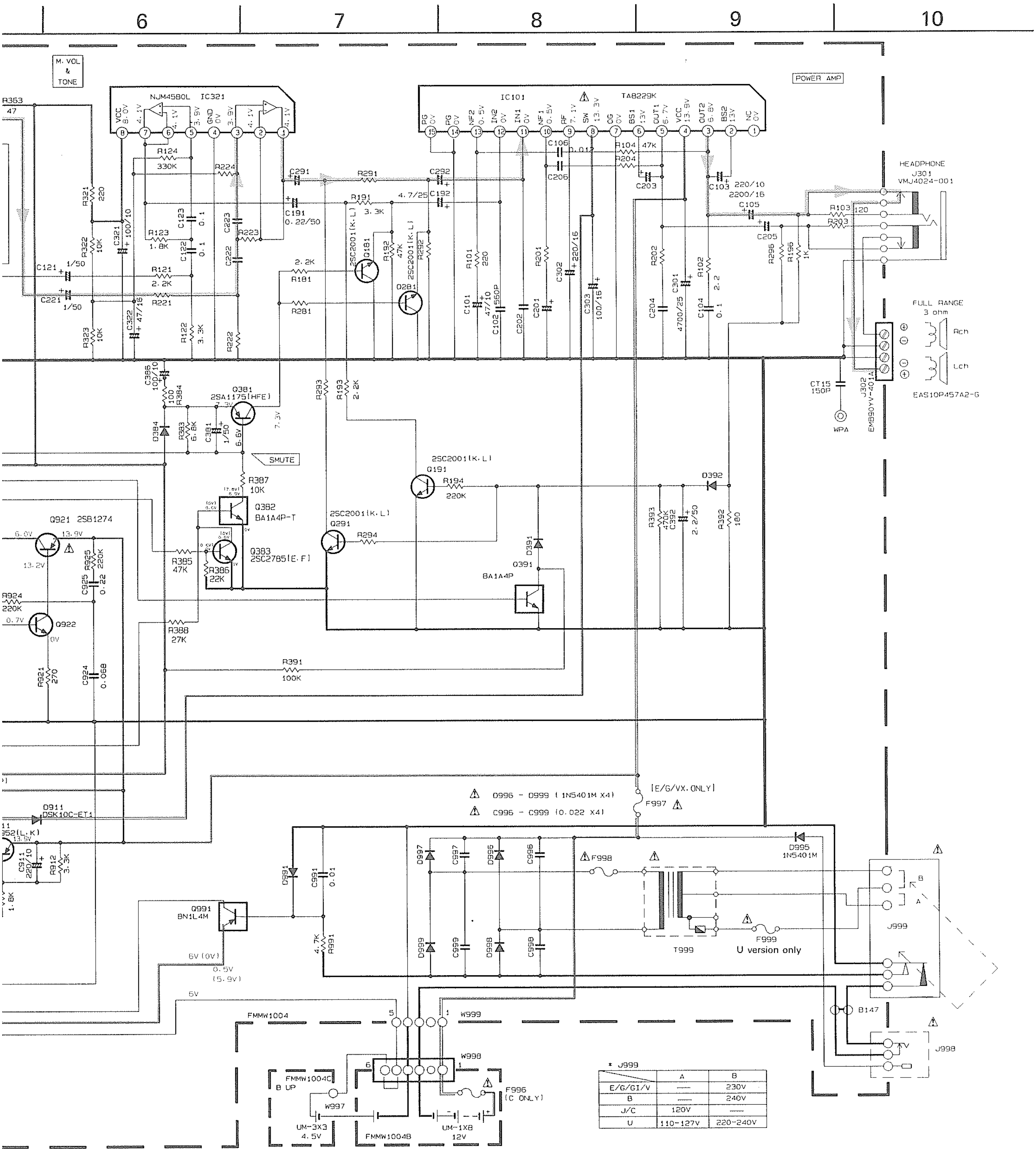
+B LINE

Power Amplifier Circuit: Drawing No. FMDH7002-001AV



PARTS	J	C	
J999	QMCB251-V01	QMC0263-004	QMC03
J998	———	———	QMA431
D995	———	———	
T999	FMTP57A2-12A	———	
F999	———	QMF51N2-R40J1	QMF51E
F998	QMF0007-5R0J1	———→	QMF51E
F997	———	———	———
F996	———	QMF0007-5R0J1	———
B147	○	○	———

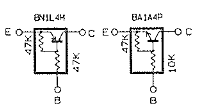
Fig. 12-3



* J999

	A	B
E/G/GI/V	——	230V
B	——	240V
J/C	120V	——
U	110-127V	220-240V

	U	E	VX/B/G/GI
	QMC0362-002	QMC0263-004	⟶
	QMA431B-V01	⟶	——
	○	○	——
		VTP57P2-12C	⟶
1	QMF51E2-R40J1	——	——
	QMF51E2-5R0J1	⟶	⟶
	——	QMF51E2-5R0J1	⟶
1	——	——	——
	——	——	○



⇨ CD Analog dignal

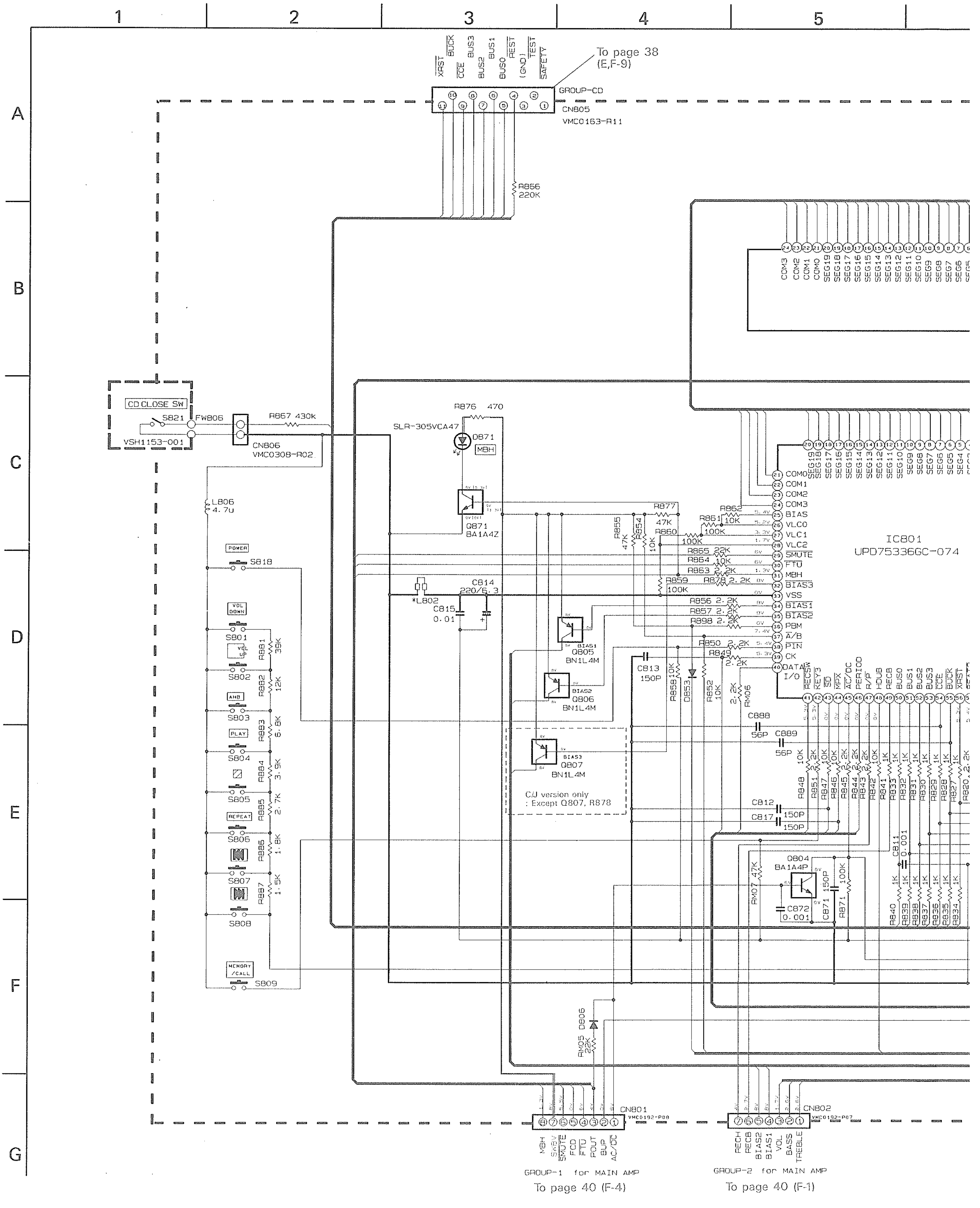
⇨ Recording signal

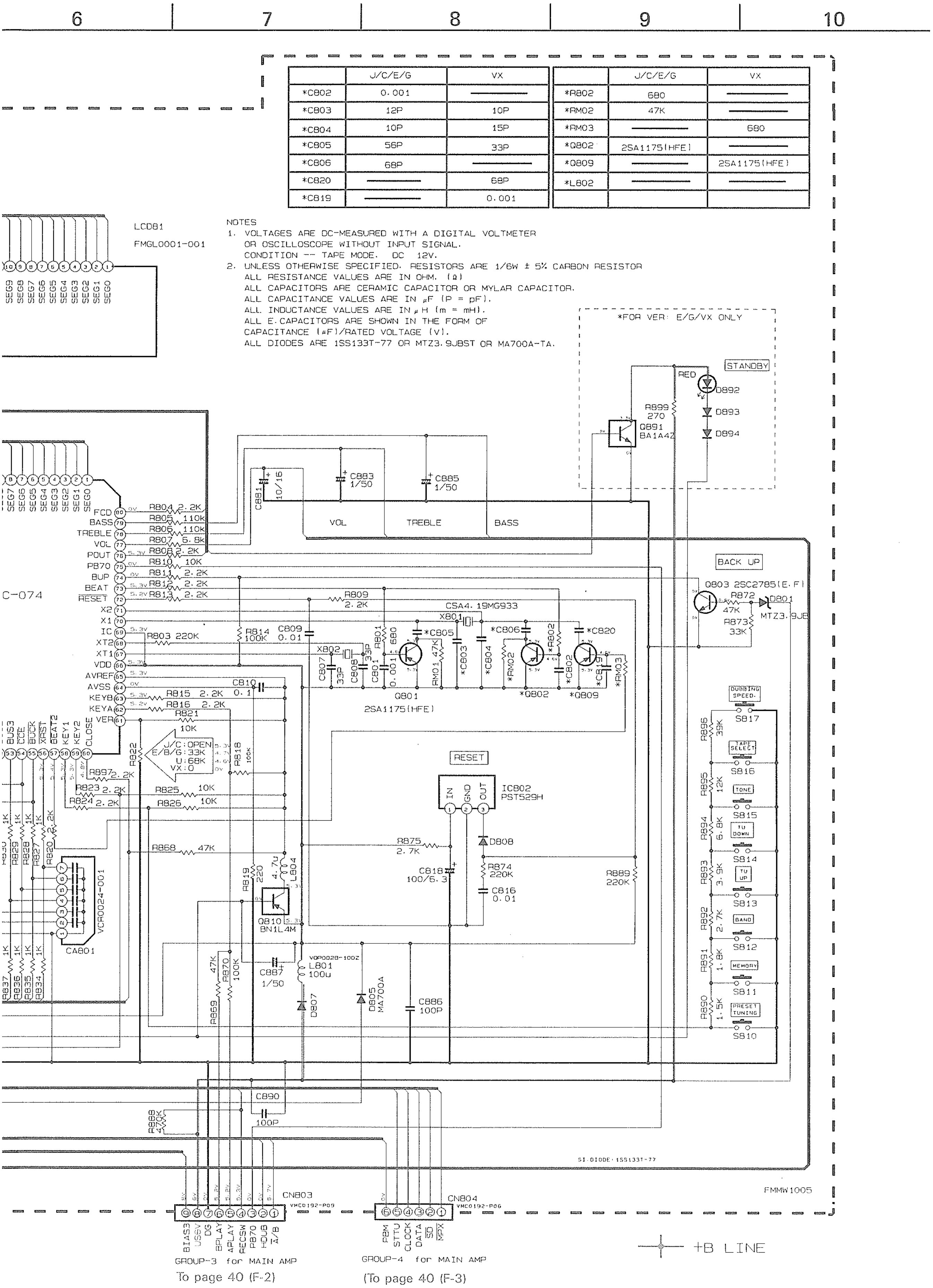
⇨ Tape P.B Signal

⇨ FM Radio signal

—✦— +B LINE

■ System Micro Computer Circuit: Drawing No. FMDH7002-001SA





	J/C/E/G	VX
*C802	0.001	———
*C803	12P	10P
*C804	10P	15P
*C805	56P	33P
*C806	68P	———
*C820	———	68P
*C819	———	0.001

	J/C/E/G	VX
*R802	680	———
*RM02	47K	———
*RM03	———	680
*Q802	2SA1175(HFE)	———
*Q809	———	2SA1175(HFE)
*L802	———	———

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLTMETER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION -- TAPE MODE. DC 12V.
2. UNLESS OTHERWISE SPECIFIED. RESISTORS ARE 1/6W ± 5% CARBON RESISTOR
   ALL RESISTANCE VALUES ARE IN OHM. (Ω)
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF (P = pF).
   ALL INDUCTANCE VALUES ARE IN μH (m = mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133T-77 OR MTZ3.9JBST OR MA700A-TA.

Tuner Circuit: Drawing No. FMD7002-006TW

	PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC1	FM NO SIGNAL	0.8	1.5	5.2	1.5	0	5.3	4.3	5.3	5.3															
IC2	FM NO SIGNAL	5.3	5.3	5.3	5.3	5.3	4.7	0.6	0	5.3	5.3	5.3	0	1.0	1.0	4.6	4.4	4.4	0.6	1.0	4.7	5.6	5.4	5.6	5.6
	FM 60dB STEREO	5.3	5.3	5.3	5.3	5.3	4.6	1.1	0	5.6	0	5.3	0	1.0	1.0	4.6	4.4	4.4	0.6	1.0	4.4	5.4	5.1	5.3	5.3
	AM NO SIGNAL	5.3	5.3	5.3	5.0	5.6	4.8	0.2	0	5.3	5.3	5.3	0	1.0	1.0	4.8	5.3	5.3	0.6	1.3	4.7	5.3	4.6	5.6	5.6
IC3	FM NO SIGNAL	2.6	2.6	5.3	5.3	5.3	5.2	5.4	0	0	2.7	0	2.5	0	1.0	0	5.2								
TR NO		Q1			Q7			Q8			Q9			Q10			Q11			Q12			Q13		
PIN NO		E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
FM 87.5MHz.NO SIGNAL		2.2	5.0	3.0	0	5.5	0.7	0	0	5.1	6.0	5.9	0	5.3	4.4	5.2	5.3	4.4	5.2	0	1.4	0.6	0.6	5.1	1.1
AM 530KHz .NO SIGNAL		0	0	0	0	0	0	0	6.0	0	6.0	0	6.0	5.3	5.3	2.4	5.3	5.3	2.4	0	1.1	0.6	0.6	4.5	1.1

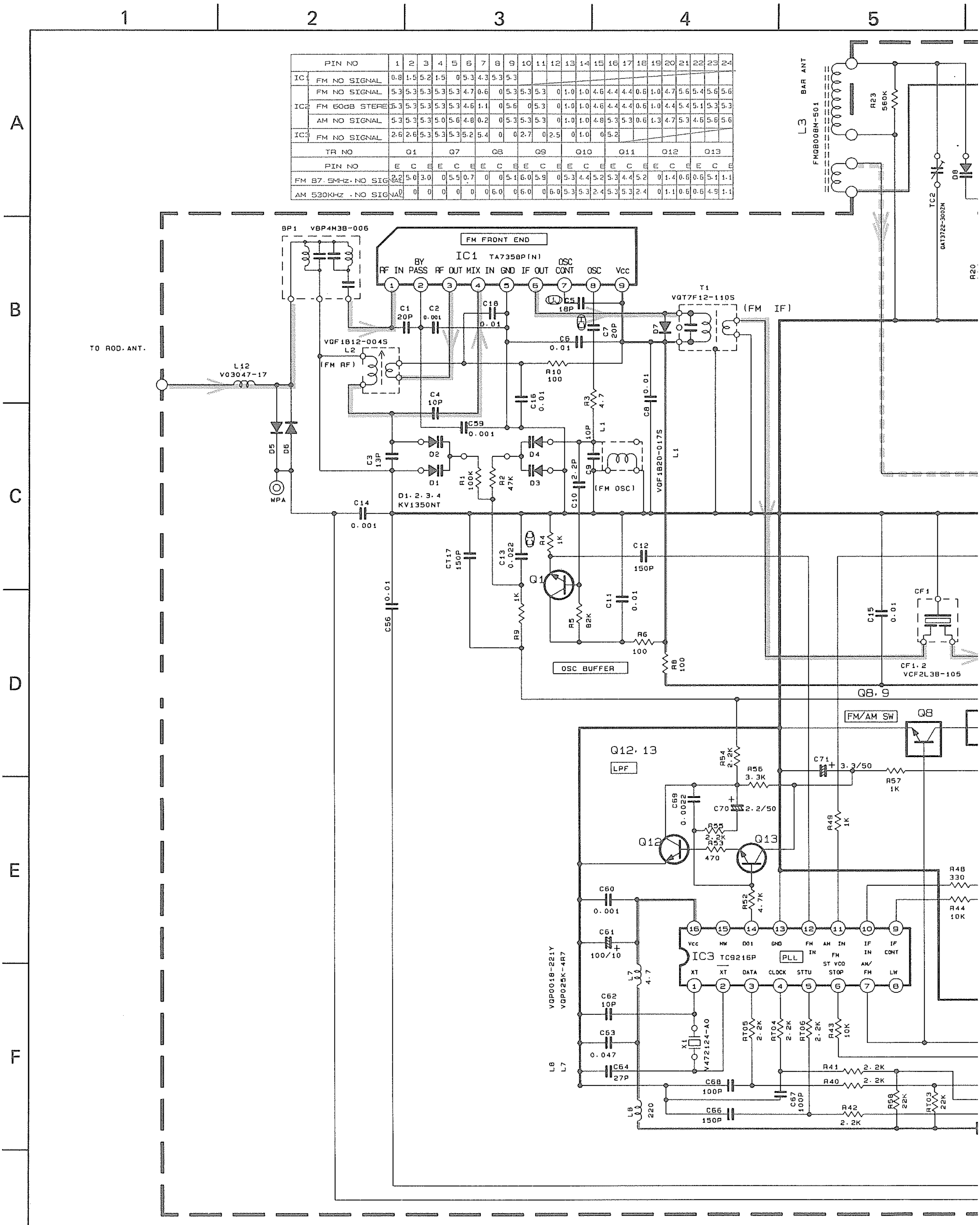
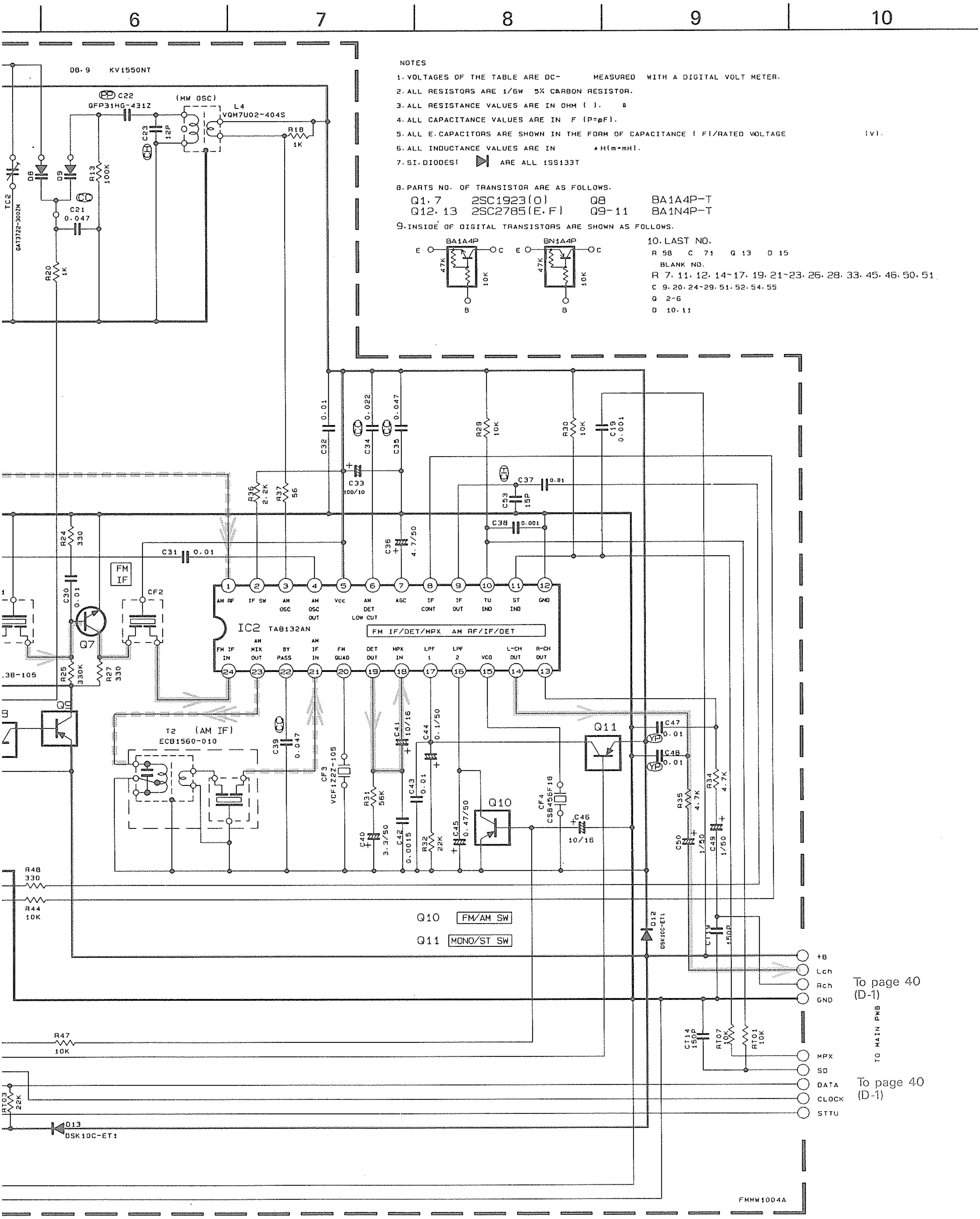


Fig. 1



NOTES

1. VOLTAGES OF THE TABLE ARE DC- MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/6W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM ( ). Ω
4. ALL CAPACITANCE VALUES ARE IN F (P=pF).
5. ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (F)/RATED VOLTAGE (V).
6. ALL INDUCTANCE VALUES ARE IN μH(m=mH).
7. SI.DIODES(▶| ARE ALL 1SS133T

8. PARTS NO. OF TRANSISTOR ARE AS FOLLOWS.

Q1, 7	2SC1923(O)	Q8	BA1A4P-T
Q12, 13	2SC2785(E, F)	Q9-11	BA1N4P-T

9. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.

10. LAST NO.
R 58 C 71 Q 13 D 15
BLANK NO.
R 7, 11, 12, 14~17, 19, 21~23, 26, 28, 33, 45, 46, 50, 51
C 9, 20, 24~29, 51, 52, 54, 55
Q 2-6
D 10, 11

Fig. 12-4

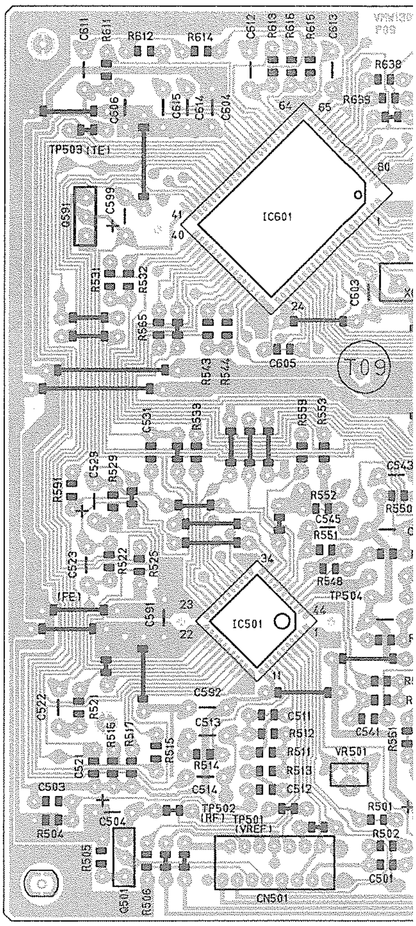
AM Radio signal
FM Radio signal
+B LINE

13. Location of P.C. Board Parts

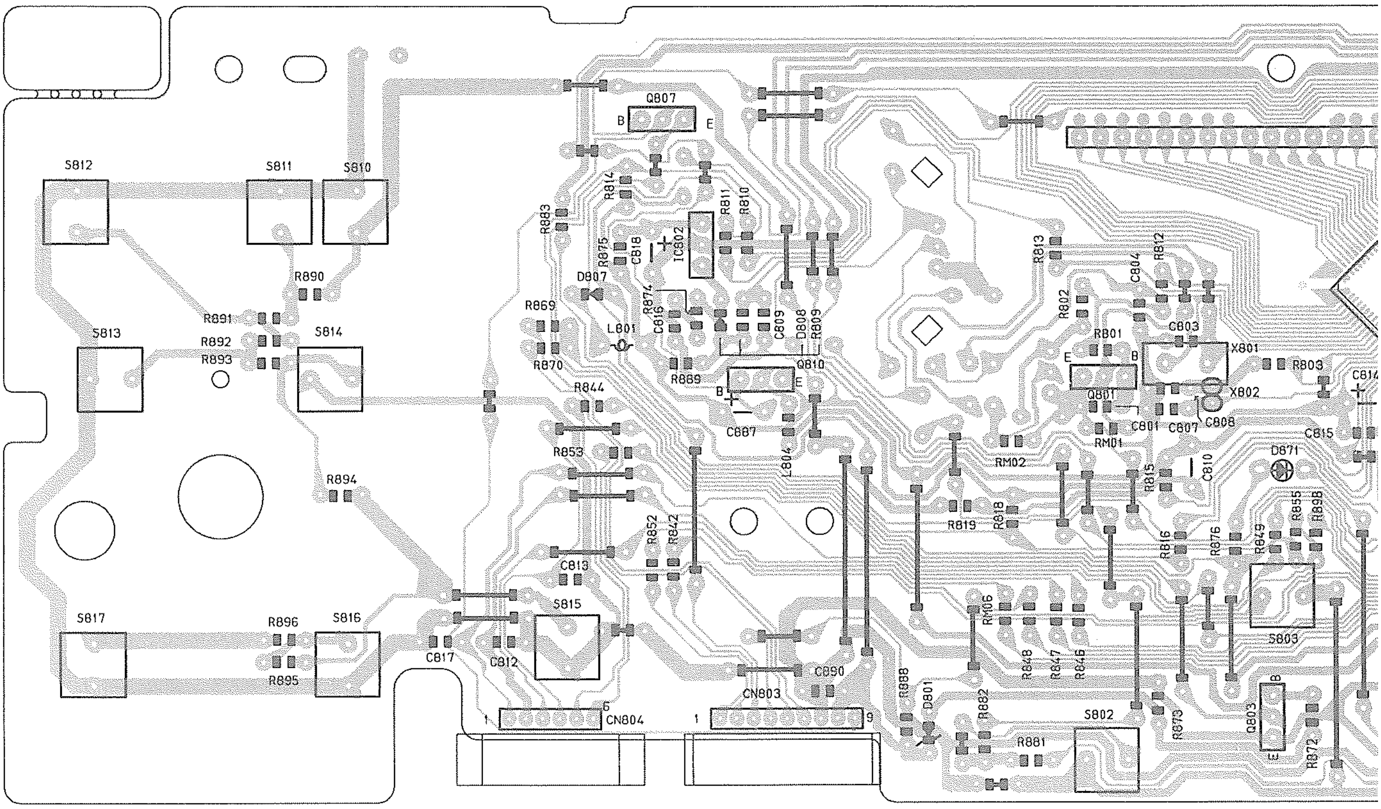
1 2 3 4 5

A B C D E F

■ **CD Amplifier P.C. Board: Block No. 0 1**



■ **System Micro Computer P.C. Board: Block No. 0 2**



6 7 8 9 10

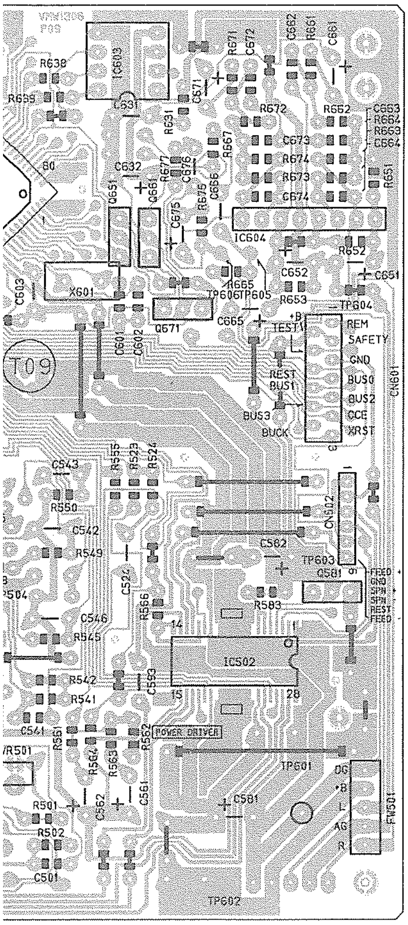
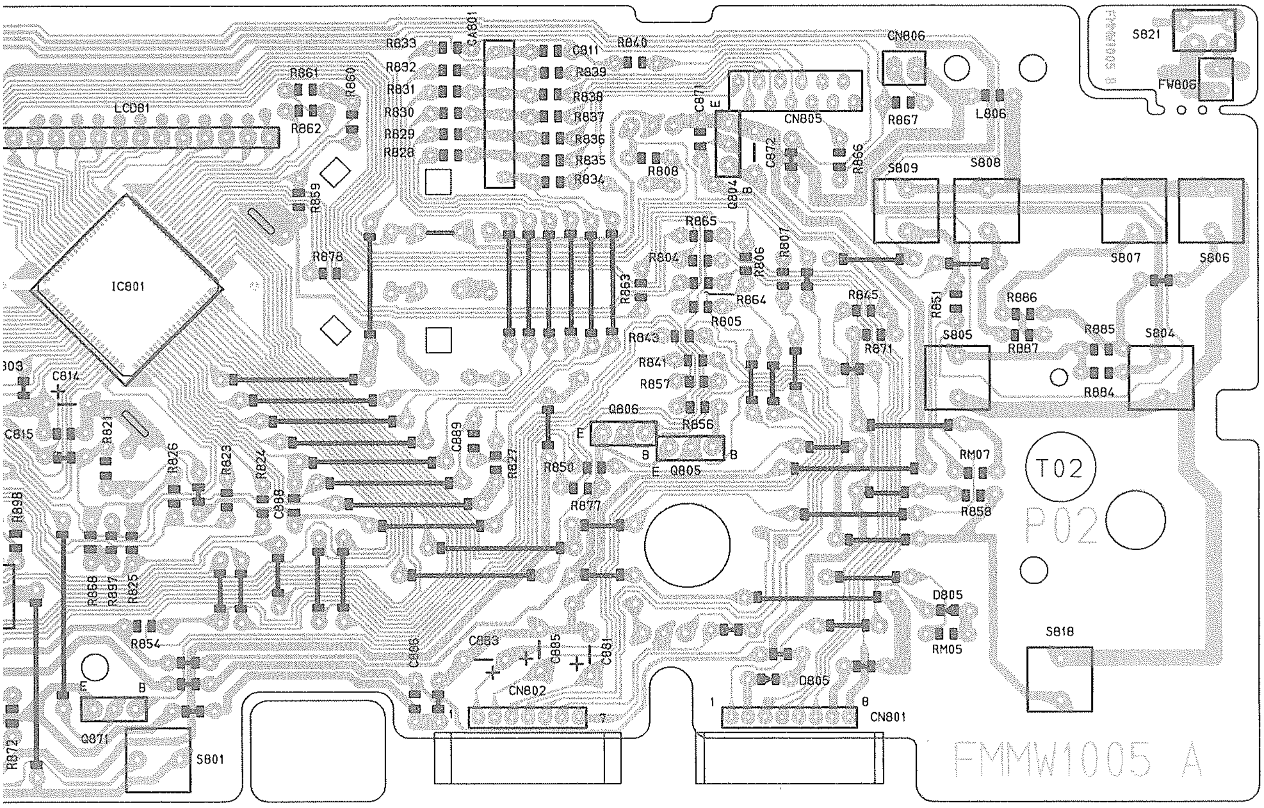


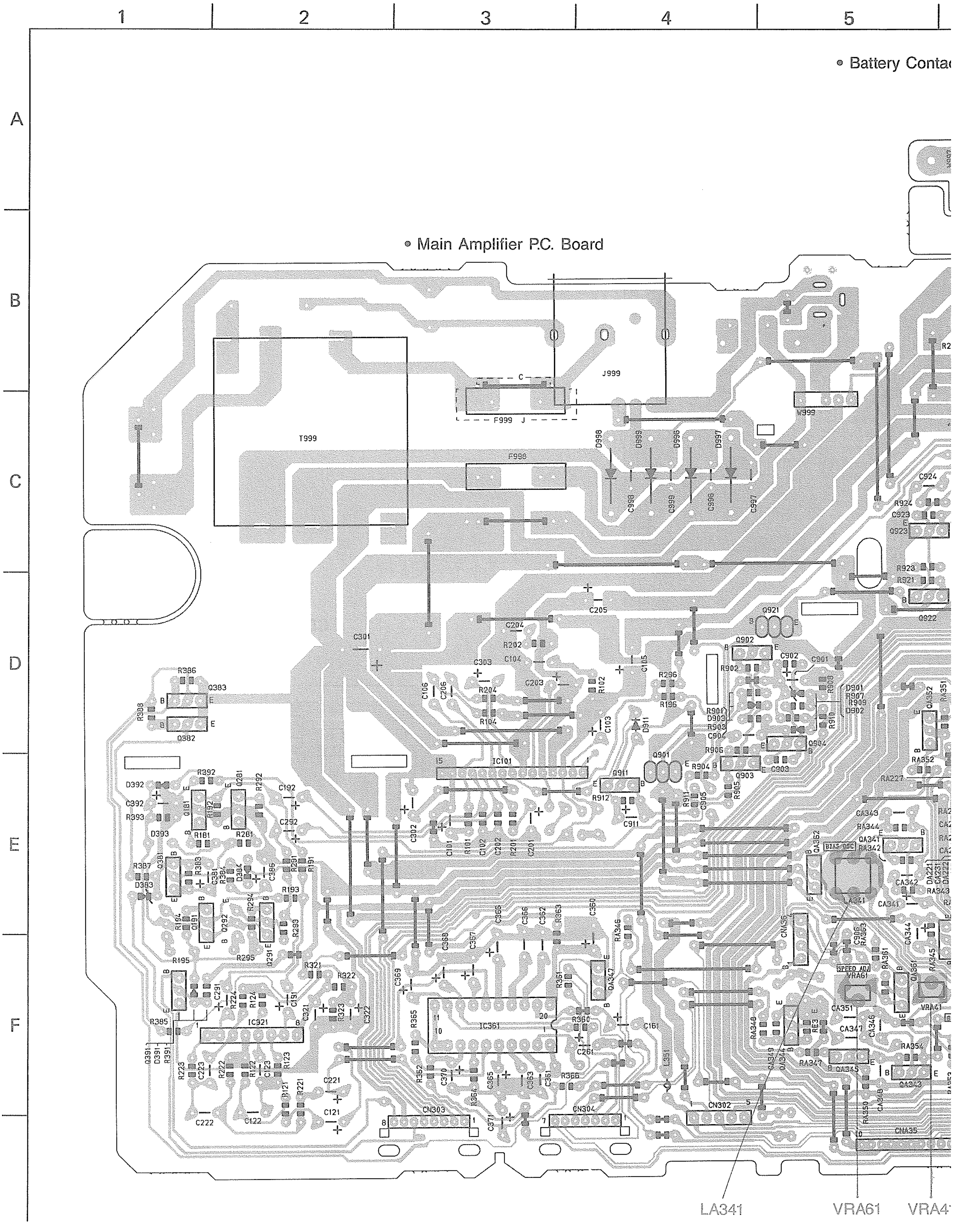
Fig. 13-1

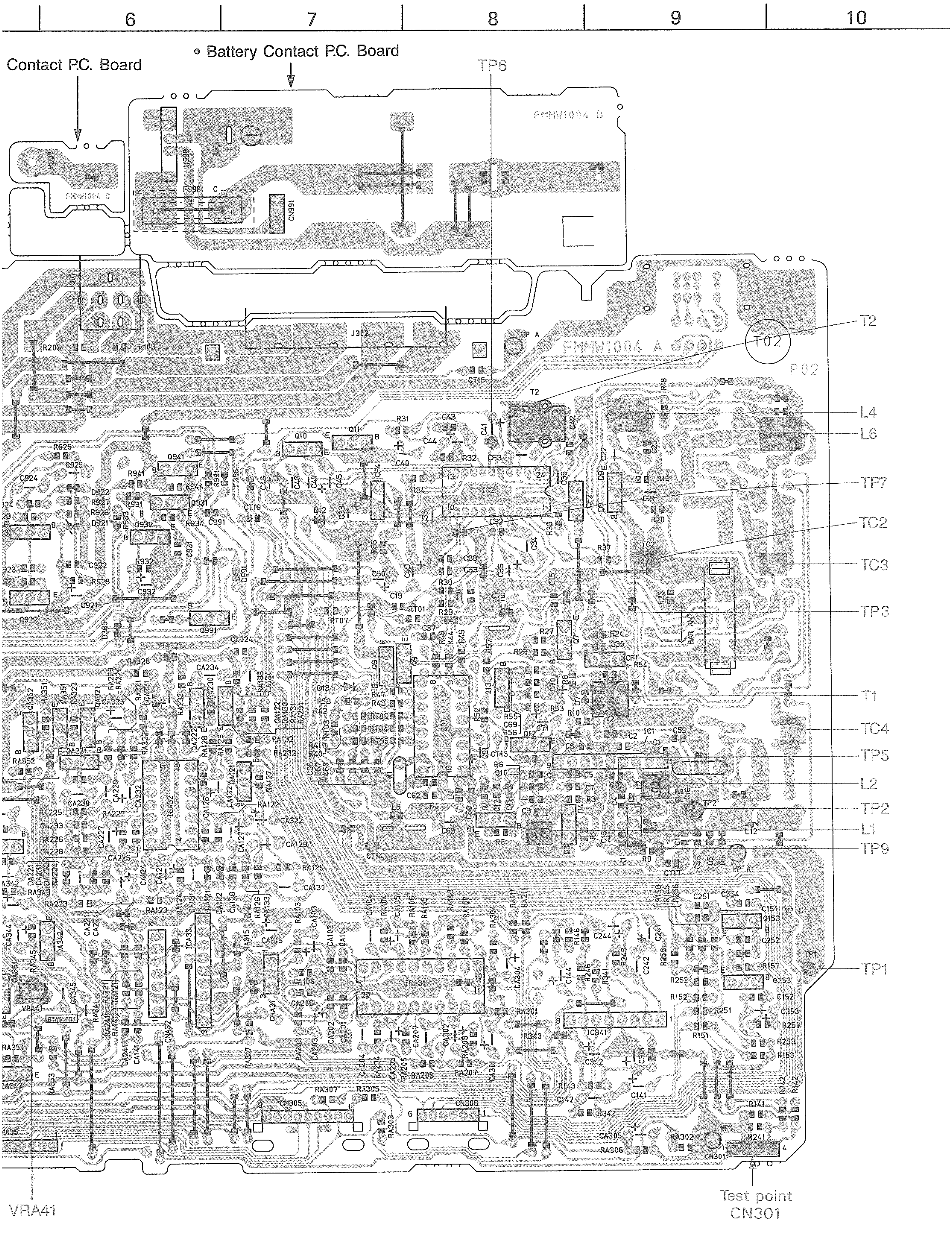


• CD Door Close/Open Switch P.C. Board

Fig. 13-2

■ Main P.C. Board : Block No. 0 3




6
7
8
9
10
Contact P.C. Board
• Battery Contact P.C. Board
TP6
FMMW1004 B
FMMW1004 C
FMMW1004 A
T2
L4
L6
TP7
TC2
TC3
TP3
T1
TC4
TP5
L2
TP2
L1
TP9
TP1
VRA41
Test point
CN301

14. Electrical Parts

• CD Amplifier P.C. Board

BLOCK NO. 01□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 501	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
	C 503	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 504	QETC1CM-106Z	E.CAPACITOR	10MF 20% 16V	
	C 511	QCSB1HJ-3R9	C.CAPACITOR	3.9PF 10% 50V	
	C 512	QCSB1HJ-270Y	C.CAPACITOR	27PF 5% 50V	
	C 513	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 514	QFN31HJ-472Z	M.CAPACITOR	4700PF 5% 50V	
	C 521	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 522	QFLC1HJ-473ZM	M.CAPACITOR	.047MF 5% 50V	
	C 523	QFV81HJ-154	M.M.CAPACITOR	.15MF 5% 50V	
	C 524	QEN61ER-475ZN	E.CAPACITOR	4.7MF +30:-10%	
	C 529	QETC1AM-336ZM	E. CAPACITOR	33MF 20% 10V	
	C 531	QCVB1CM-822Y	C.CAPACITOR	8200PF 20% 16V	
	C 541	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 542	QFLC1HJ-103ZM	M.CAPACITOR	.010MF 5% 50V	
	C 543	QFLC1HJ-393ZM	M.CAPACITOR	.039MF 5% 50V	
	C 545	QEN61HM-105Z	NP E CAPACITOR	1.0MF 20% 50V	
	C 546	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C 561	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V	
	C 562	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 581	QETC1AM-477ZN	E.CAPACITOR	470MF 20% 10V	
	C 582	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 591	VCP0012-105Z	C CAPACITOR		
	C 592	VCP0012-105Z	C CAPACITOR		
	C 593	QCC11EM-104V	C CAPACITOR	.10MF 20% 25V	
	C 599	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 601	QCS11HJ-330	C.CAPACITOR	FOR CRYSTAL	
	C 602	QCS11HJ-330	C.CAPACITOR	FOR CRYSTAL	
	C 603	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
	C 604	QCC11EM-104V	C CAPACITOR	.10MF 20% 25V	
	C 605	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 606	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
	C 611	QCS31HJ-101Z	C.CAPACITOR	100PF 5% 50V	
	C 612	QFLC1HJ-103ZM	M.CAPACITOR	.010MF 5% 50V	
	C 613	QFLC1HJ-103ZM	M.CAPACITOR	.010MF 5% 50V	
	C 614	QFN31HJ-332Z	M.CAPACITOR	3300PF 5% 50V	
	C 615	QFN31HJ-332Z	M.CAPACITOR	3300PF 5% 50V	
	C 631	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
	C 632	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	
	C 651	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 652	QETC1CM-226ZN	E.CAPACITOR	22MF 20% 16V	
	C 661	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 662	QCXB1CM-472Y	C.CAPACITOR	4700PF 20% 16V	
	C 663	QCVB1CM-822Y	C.CAPACITOR	8200PF 20% 16V	
	C 664	QCBB1HK-820Y	C.CAPACITOR	82PF 10% 50V	
	C 665	QETC1EM-335ZM	E.CAPACITOR	3.3MF 20% 25V	
	C 666	QCC11EM-123V	C.CAPACITOR	.012MF 20% 25V	
	C 671	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 672	QCXB1CM-472Y	C.CAPACITOR	4700PF 20% 16V	
	C 673	QCVB1CM-822Y	C.CAPACITOR	8200PF 20% 16V	
	C 674	QCBB1HK-820Y	C.CAPACITOR	82PF 10% 50V	
	C 675	QETC1EM-335ZM	E.CAPACITOR	3.3MF 20% 25V	
	C 676	QCC11EM-123V	C.CAPACITOR	.012MF 20% 25V	
	CN501	VMC0272-015	CONNECTOR	TO PICK UP	
	CN601	VMC0163-011	CONNECTOR	TO CPU	

BLOCK NO. 01□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	IC501	TA8191F	IC		
	IC502	BA6298FP	IC		
	IC601	TC9236AF	IC		
	IC603	TDA1311A	IC		
	IC604	BA15218N	IC		
	Q 501	2SA952(L,K)	TRANSISTOR I/M		
	Q 581	2SA952(L,K)	TRANSISTOR I/M	5V REGULATOR	
	Q 591	2SA933S(RS)	TRANSISTOR		
	Q 651	BN1A4Z-T	DIGITAL TRANSI.		
	Q 661	BA1A4Z-T	DIGITAL TRANSI.		
	Q 671	BA1A4Z-T	DIGITAL TRANSI.		
	R 501	QRD161J-124	C.RESISTOR	120K 5% 1/6W	
	R 502	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 504	QRD161J-202	C.RESISTOR	2.0K 5% 1/6W	
	R 505	QRD161J-220	C.RESISTOR	22 5% 1/6W	
	R 506	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 511	QRD161J-183	C.RESISTOR	18K 5% 1/6W	
	R 512	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	R 513	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 514	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 515	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 516	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 517	QRD161J-202	C.RESISTOR	2.0K 5% 1/6W	
	R 521	QRD161J-154	C.RESISTOR	150K 5% 1/6W	
	R 522	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	R 523	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 524	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	R 525	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 529	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	R 531	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 532	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 533	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	R 541	QRD161J-123	C.RESISTOR	12K 5% 1/6W	
	R 542	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 543	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 544	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 545	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 548	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	R 549	QRD161J-821	C.RESISTOR	820 5% 1/6W	
	R 550	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 551	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 552	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	R 553	QRD161J-821	C.RESISTOR	820 5% 1/6W	
	R 555	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 559	QRD161J-125	C.RESISTOR	1.2M 5% 1/6W	
	R 561	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	R 562	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 563	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W	
	R 564	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 565	QRD161J-683	C.RESISTOR	68K 5% 1/6W	
	R 566	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 583	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 591	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 611	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 612	QRD161J-103	C.RESISTOR	10K 5% 1/6W	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 613	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 614	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 615	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W	
	R 616	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	R 631	QRD161J-820	C.RESISTOR	82 5% 1/6W	
	R 638	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	R 639	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 651	QRD161J-820	C.RESISTOR	82 5% 1/6W	
	R 652	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 653	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 661	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 662	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	R 663	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 664	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 665	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 667	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W	
	R 671	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 672	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	R 673	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 674	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 675	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 677	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W	
	VR501	QVZ3523-154AZ	V RESISTOR	TR OFFSET ADJ.	
	X 601	CSA8.46MT	CERAMIC RESONAT		

• System Micro Computer P.C. Board

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 801	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 802	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 803	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
	C 804	QCT30CH-100Y	C.CAPACITOR	10PF 5% 50V	
	C 805	QCS31HJ-560Z	C.CAPA I.M	56PF 5% 50V	
	C 806	QCS31HJ-680Z	C.CAPACITOR	68PF 5% 50V	
	C 807	QCS11HJ-330	C.CAPACITOR	33PF 5% 50V	
	C 808	QCS11HJ-330	C.CAPACITOR	33PF 5% 50V	
	C 809	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 810	QFV41HJ-104ZM	TF.CAPACITOR	.10MF 5% 50V	
	C 811	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 812	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 813	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 814	QEK60JM-227ZM	E CAPACITOR	220MF 20% 6.3V	
	C 815	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 816	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 817	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 818	QER60JM-107Z	E. CAPACITOR	100MF 20% 6.3V	
	C 871	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 872	QCY41HK-102	C.CAPACITOR	1000PF 10% 50V	
	C 881	QEK61CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 883	QEK61HM-105Z	E. CAPAITOR	1.0MF 20% 50V	
	C 885	QEK61HM-105Z	E. CAPAITOR	1.0MF 20% 50V	
	C 886	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 887	QEK61HM-105Z	E. CAPAITOR	1.0MF 20% 50V	
	C 888	QCSB1HJ-560Y	C CAPACITOR	56PF 5% 50V	
	C 889	QCSB1HJ-560Y	C CAPACITOR	56PF 5% 50V	
	C 890	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	CA801	VCR0024-001	C NETWORK		
	CN801	VMC0192-P08	CONNECTOR	MAIN	
	CN802	VMC0192-P07	CONNECTOR	MAIN	
	CN803	VMC0192-P09	CONNECTOR	MAIN	
	CN804	VMC0192-P06	CONNECTOR	MAIN	
	CN805	VMC0163-R11	CONNECTOR	# 17001 --	
	CN806	VMC0308-R02	CONNECTOR		
	D 801	MTZ3.9JB	Z.DIODE I.M		
	D 805	MA700A	S.B. DIODE		
	D 806	1SS133	DIODE I/M		
	D 807	1SS133	DIODE I/M		
	D 808	1SS133	DIODE I/M		
	D 853	1SS133	DIODE I/M		
	D 871	SLR-305VCA47	LED		
	FW806	EWR32D-14SJ	FLAT WIRE		
	IC801	UPD75336GC-074		U-COM	
	IC802	PST529H-T	IC		
	L 801	VQP0028-100Z	INDUCTOR		
	L 804	VQP0018-4R7	INDUCTOR		
	L 806	VQP0018-4R7	INDUCTOR		
	LCD81	FMGL0001-001	LCD		
	Q 801	2SA1175	TRANSISTOR I/M		
	Q 802	2SA1175	TRANSISTOR I/M		
	Q 803	2SC2785	TRANSISTOR I/M		
	Q 804	BA1A4P	DIGITAL TRANSI.		
	Q 805	BN1L4M	DIGITAL TRANSI.		
	Q 806	BN1L4M	DIGITAL TRANSI.		

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q 807	BN1L4M	DIGITAL TRANSI.		
	Q 810	BN1L4M	DIGITAL TRANSI.		
	Q 871	BA1A4Z-T	DIGITAL TRANSI.		
	R 801	QRD161J-681	C.RESISTOR	680 5% 1/6W	
	R 802	QRD161J-681	C.RESISTOR	680 5% 1/6W	
	R 803	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 804	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 805	QRD161J-114	C.RESISTOR	110K 5% 1/6W	
	R 806	QRD161J-114	C.RESISTOR	110K 5% 1/6W	
	R 807	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 808	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 809	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 810	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 811	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 812	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 813	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 814	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 815	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 816	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 818	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 819	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	R 821	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 823	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 824	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 825	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 826	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 827	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 828	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 829	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 830	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 831	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 832	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 833	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 834	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 835	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 836	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 837	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 838	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 839	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 840	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 841	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 842	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 843	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 844	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 845	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 846	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 847	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 848	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 849	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 850	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 851	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 852	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 854	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 855	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 856	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 857	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 858	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 859	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 860	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 861	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 862	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 863	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 864	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 865	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 866	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 867	QRD161J-434YT	C.RESISTOR	430K 5% 1/6W	
	R 868	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 869	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 870	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 871	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 872	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 873	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	R 874	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 875	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	R 876	QRD161J-471	C.RESISTOR	470 5% 1/6W	
	R 877	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 878	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 881	QRD161J-393	C.RESISTOR	39K 5% 1/6W	
	R 882	QRD161J-123	C.RESISTOR	12K 5% 1/6W	
	R 883	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 884	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	R 885	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	R 886	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	R 887	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W	
	R 888	QRD161J-474	C.RESISTOR	470K 5% 1/6W	
	R 889	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 890	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W	
	R 891	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	R 892	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	R 893	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	R 894	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 895	QRD161J-123	C.RESISTOR	12K 5% 1/6W	
	R 896	QRD161J-393	C.RESISTOR	39K 5% 1/6W	
	R 897	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 898	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RM 01	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RM 02	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RM 05	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	RM 06	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RM 07	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	S 801	QSQ4H11-V02Z	TACT SW.	VOL DOWN	
	S 802	QSQ4H11-V02Z	TACT SW.	VOL UP	
	S 803	QSQ4H11-V02Z	TACT SW.	AHB	
	S 804	QSQ4H11-V02Z	TACT SW.	PLAY	
	S 805	QSQ4H11-V02Z	TACT SW.	STOP	
	S 806	QSQ4H11-V02Z	TACT SW.	REPEAT	
	S 807	QSQ4H11-V02Z	TACT SW.	REW	
	S 808	QSQ4H11-V02Z	TACT SW.	FWD	
	S 809	QSQ4H11-V02Z	TACT SW.	MEMORY/CALL	
	S 810	QSQ4H11-V02Z	TACT SW.	PRESET TUNNING	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	S 811	QSQ4H11-V02Z	TACT SW.	MEMORY	
	S 812	QSQ4H11-V02Z	TACT SW.	BAND	
	S 813	QSQ4H11-V02Z	TACT SW.	TU UP	
	S 814	QSQ4H11-V02Z	TACT SW.	TU DOWN	
	S 815	QSQ4H11-V02Z	TACT SW.	TONE	
	S 816	QSQ4H11-V02Z	TACT SW.	TAPE SELLECT	
	S 817	QSQ4H11-V02Z	TACT SW.	DUBBING SPEED	
	S 818	QSQ4H11-V02Z	TACT SW.	POWER	
	S 821	VSH1153-001	SWITCH		
	X 801	CSA4.19MG933	CERA LOCK		
	X 802	VCX5000-002	CRYSTAL		

• Main P.C. Board

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
⚠	BP 01	VBP4M3B-005	BP FILTER		
	C 001	QCT30CH-200Y	C CAPACITOR	20PF 5% 50V	
	C 002	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 003	QCSB1HJ-130Y	C CAPACITOR	13PF 5% 50V	
	C 004	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
⚠	C 005	QCT30UJ-180Y	C.CAPACITOR	18PF 5% 50V	
	C 006	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
⚠	C 007	QCT30CH-200Y	C CAPACITOR	20PF 5% 50V	
	C 008	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
⚠	C 009	QCT30UJ-100Y	C.CAPACITOR	10PF 5% 50V	
⚠	C 010	QCSB1HK-2R2Y	C CAPACITOR	2.2PF 10% 50V	
	C 011	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 012	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 013	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
	C 014	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 015	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 016	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 018	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 019	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 021	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 022	QFP31HG-431ZM	PS CAPACITOR	430PF 2% 50V	
	C 023	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
	C 030	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 031	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 032	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 033	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 034	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
	C 035	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 036	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 037	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 038	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 039	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 040	QETC1HM-335Z	E.CAPACITOR	3.3MF 20% 50V	
	C 041	QETC1CM-106Z	E.CAPACITOR	10MF 20% 16V	
	C 042	QCXB1CM-152Y	C.CAPACITOR	1500PF 20% 16V	
	C 043	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 044	QETC1HM-104Z	E.CAPACITOR	.10MF 20% 50V	
	C 045	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	
	C 046	QETC1CM-106Z	E.CAPACITOR	10MF 20% 16V	
	C 047	QCC11EM-103V	C.CAPACITOR	.010MF 20% 25V	
	C 048	QCC11EM-103V	C.CAPACITOR	.010MF 20% 25V	
	C 049	QETC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 050	QETC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 053	QCT30CH-150Y	C.CAPACITOR	15PF 5% 50V	
	C 056	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 059	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 060	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 061	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 062	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
	C 063	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 064	QCSB1HJ-270Y	C.CAPACITOR	27PF 5% 50V	
	C 066	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 067	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 068	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 069	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 070	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C 071	QETC1HM-335Z	E.CAPACITOR	3.3MF 20% 50V	
	C 101	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V	
	C 102	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	C 103	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	
	C 104	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C 105	QETB1CM-228	E.CAPACITOR	2200MF 20% 16V	
	C 106	QFLC1HJ-123ZM	M.CAPA I.M	.012MF 5% 50V	
	C 121	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	
	C 122	QFV11HJ-104AZM	TF CAPACITOR	.10MF 5% 50V	
	C 123	QFV11HJ-104AZM	TF CAPACITOR	.10MF 5% 50V	
	C 141	QEK61HM-335ZN	E. CAPACITOR	3.3MF 20% 50V	
	C 142	QCS31HJ-470Z	C.CAPACITOR	47PF 5% 50V	
	C 144	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C 151	QCXB1CM-472Y	C.CAPACITOR	4700PF 20% 16V	
	C 152	QCSB1HJ-560Y	C CAPACITOR	56PF 5% 50V	
	C 161	QEK61HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 191	QETC1HM-224Z	E.CAPACITOR	.22MF 20% 50V	
	C 192	QETC1EM-475ZM	E CAPACITOR	4.7MF 20% 25V	
	C 201	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V	
	C 202	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	C 203	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	
	C 204	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C 205	QETB1CM-228	E.CAPACITOR	2200MF 20% 16V	
	C 206	QFLC1HJ-123ZM	M.CAPA I.M	.012MF 5% 50V	
	C 221	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	
	C 222	QFV11HJ-104AZM	TF CAPACITOR	.10MF 5% 50V	
	C 223	QFV11HJ-104AZM	TF CAPACITOR	.10MF 5% 50V	
	C 241	QEK61HM-335ZN	E. CAPACITOR	3.3MF 20% 50V	
	C 242	QCS31HJ-470Z	C.CAPACITOR	47PF 5% 50V	
	C 244	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C 251	QCXB1CM-472Y	C.CAPACITOR	4700PF 20% 16V	
	C 252	QCSB1HJ-560Y	C CAPACITOR	56PF 5% 50V	
	C 261	QEK61HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 291	QETC1HM-224Z	E.CAPACITOR	.22MF 20% 50V	
	C 292	QETC1EM-475ZM	E CAPACITOR	4.7MF 20% 25V	
	C 301	QETB1EM-478E	E.CAPACITOR	4700MF 20% 25V	
	C 302	QETA1CM-227	E.CAPACITOR	220MF 20% 16V	
	C 303	QETC1CM-107	E.CAPACITOR	100MF 20% 16V	
	C 321	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 322	QETC1CM-476Z	E.CAPACITOR	47MF 20% 16V	
	C 341	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
	C 342	QER51AM-227	E.CAPACITOR	220MF 20% 10V	
	C 353	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C 354	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 360	QETB1CM-477M	E.CAPACITOR	470MF 20% 16V	
	C 361	QFLB1HJ-822	M.CAPACITOR	8200PF 5% 50V	
	C 362	QFLB1HJ-822	M.CAPACITOR	8200PF 5% 50V	
	C 363	QFV71HJ-334ZM	TF CAPACITOR	.33MF 5% 50V	
	C 364	QFV71HJ-334ZM	TF CAPACITOR	.33MF 5% 50V	
	C 365	QEK51HM-106	E.CAPACITOR	10MF 20% 50V	
	C 366	QEK51HM-106	E.CAPACITOR	10MF 20% 50V	
	C 367	QETC1HM-476ZM	E.CAPACITOR	47MF 20% 50V	
	C 368	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	
	C 369	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 370	QEK61HM-474Z	E.CAPACITOR	.47MF 20% 50V	
	C 371	QEK61HM-225ZM	E.CAPACITOR	2.2MF 20% 50V	
	C 381	QETC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 386	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 392	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C 901	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V	
	C 902	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 903	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 904	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C 911	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	
	C 921	QETC1AM-226ZN	E.CAPACITOR	22MF 20% 10V	
	C 922	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 923	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 924	QFV71HJ-683ZM	TF.CAPACITOR	.068MF 5% 50V	
	C 925	QFV11HJ-224AZM	TF CAPACITOR	.22MF 5% 50V	
	C 931	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 932	QETC1EM-107Z	E.CAPACITOR	100MF 20% 25V	
	C 991	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 996	QCF31HP-223Z	C.CAPACITOR	.022MF +100:-0%	
	C 997	QCF31HP-223Z	C.CAPACITOR	.022MF +100:-0%	
	C 998	QCF31HP-223Z	C.CAPACITOR	.022MF +100:-0%	
	C 999	QCF31HP-223Z	C.CAPACITOR	.022MF +100:-0%	
	CA101	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	CA102	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	CA103	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	CA104	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA105	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	
	CA106	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	CA107	QFLC1HJ-183ZM	M.CAPACITOR	.018MF 5% 50V	
	CA121	QETC1HM-335Z	E.CAPACITOR	3.3MF 20% 50V	
	CA126	QCSB1HJ-220Y	C.CAPACITOR	22PF 5% 50V	
	CA127	QETC1AM-226ZN	E.CAPACITOR	22MF 20% 10V	
	CA128	QCXB1CM-682Y	C.CAPACITOR	6800PF 20% 16V	
	CA129	QFLC1HJ-333ZM	M.CAPACITOR	.033MF 5% 50V	
	CA130	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA131	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	CA132	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	CA133	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	CA134	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA141	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	CA201	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	CA202	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
	CA203	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	CA204	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA205	QEK61HM-105Z	E. CAPACITOR	1.0MF 20% 50V	
	CA206	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	CA207	QFLC1HJ-183ZM	M.CAPACITOR	.018MF 5% 50V	
	CA221	QETC1HM-335Z	E.CAPACITOR	3.3MF 20% 50V	
	CA226	QCSB1HJ-220Y	C.CAPACITOR	22PF 5% 50V	
	CA227	QETC1AM-226ZN	E.CAPACITOR	22MF 20% 10V	
	CA228	QCXB1CM-682Y	C.CAPACITOR	6800PF 20% 16V	
	CA229	QFLC1HJ-333ZM	M.CAPACITOR	.033MF 5% 50V	
	CA230	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA231	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	CA232	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CA233	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	CA234	QFN31HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	CA241	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	CA301	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	CA302	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
	CA304	QETC1HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	CA305	QEK61HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	CA315	QETC1CM-106Z	E.CAPACITOR	10MF 20% 16V	
	CA321	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V	
	CA322	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V	
	CA323	QETC1AM-226ZN	E.CAPACITOR	22MF 20% 10V	
	CA324	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	CA341	QETC1CM-106Z	E.CAPACITOR	10MF 20% 16V	
	CA342	QFLC1HJ-473ZM	M.CAPACITOR	.047MF 5% 50V	
	CA343	QFN31HJ-103Z	M.CAPACITOR	.010MF 5% 50V	
	CA344	QETC1HM-104Z	E.CAPACITOR	.10MF 20% 50V	
	CA345	QFP32AJ-392ZM	PP CAPACITOR	3900PF 5% 100V	
	CA346	QFLB1HJ-821	M.CAPACITOR	820PF 5% 50V	
	CA347	QFP41HJ-361	PP CAPACITOR	360PF 5% 50V	
	CA348	QCC31EM-393ZV	C.CAPACITOR	.039MF 20% 25V	
	CA349	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	CF 01	VCF2L3B-105	C FILTER		
	CF 02	VCF2L3B-105	C FILTER		
	CF 03	VCF1Z2Z-105Z	C FILTER		
	CF 04	CSB456F18	CERA LOCK		
	CNA31	VMC0040-003	CONNECTOR IM		
	CNA32	VMC0040-005	CONECTOR		
	CNA35	VMC0075-010N	CONNECTOR		
	CNA36	VMC0166-004Z	CONNECTOR		
	CN301	VMC0238-004Z	CONNECTOR	TEST-POINT	
	CN302	VMC0107-R05	SOCKET	TO CD	
	CN303	VMC0192-S08	CONNECTOR	TO U-COM	
	CN304	VMC0192-S07	CONNECTOR	TO U-COM	
	CN305	VMC0192-S09	CONNECTOR	TO U-COM	
	CN306	VMC0192-S06	CONNECTOR	TO U-COM	
	CT014	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	CT015	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	CT017	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	CT019	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	D 001	KV1350NT	VARI CAP		
	D 002	KV1350NT	VARI CAP		
	D 003	KV1350NT	VARI CAP		
	D 004	KV1350NT	VARI CAP		
	D 005	1SS133	DIODE I/M		
	D 006	1SS133	DIODE I/M		
	D 007	1SS133	DIODE I/M		
	D 008	KV1550NTA	VARI CAP		
	D 009	KV1550NTA	VARI CAP		
	D 012	DSK10C-E	DIODE		
	D 013	DSK10C-E	DIODE		
	D 383	MTZ5.1JB	Z DIODE I.M.		
	D 384	1SS133	DIODE I/M		
	D 385	1SS133	DIODE I/M		
	D 386	1SS133	DIODE I/M		
	D 391	1SS133	DIODE I/M		

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D 392	1SS133	DIODE I/M		
	D 901	MA4075(M)	Z DIODE I/M		
	D 902	1SS133	DIODE I/M		
	D 903	1SS133	DIODE I/M		
	D 911	DSK10C-E	DIODE		
	D 921	RD5.6JSAB1	Z DIODE		
	D 922	1SS133	DIODE I/M		
	D 991	1SS133	DIODE I/M		
⚠	D 996	1N5401M	DIODE		
⚠	D 997	1N5401M	DIODE		
⚠	D 998	1N5401M	DIODE		
⚠	D 999	1N5401M	DIODE		
	DA121	1SS133	DIODE I/M		
	DA122	1SS133	DIODE I/M		
	DA221	1SS133	DIODE I/M		
	DA222	1SS133	DIODE I/M		
	IC 01	TA7358P(N)	I.C.		
	IC 02	TA8132AN	IC		
	IC 03	TC9216P	IC		
	ICA31	LA3246	I.C.		
	ICA32	LA3220	I.C.		
	ICA33	BA3126N	I.C.		
	IC101	TA8229K	IC		
	IC321	NJM4580L	IC		
	IC341	NJM4580L	IC		
	IC361	TA8184P	I.C.		
	J 301	VMJ4024-001	JACK		
	J 302	EMB90YV-401A	SPK.TERMINAL		
⚠	J 999	QMCB251-V01	AC SOCKET		
⚠	L 001	VQF1B20-017	OSC COIL	FM OSC	
	L 002	VQF1B12-004	RF COIL	FM RF	
	L 003	FMQB008M-501	BAR ANTENNA	MW RF	
	L 004	VQM7U02-404	OSC COIL(MW)	MW OSC	
	L 007	VQP0018-4R7	INDUCTOR		
	L 008	VQP0018-221	INDUCTOR		
⚠	L 012	V03047-17	INDUCTOR	RF COIL	
	L 351	VQZ0048-009	INDUCTOR		
	LA341	VQH1009-026	OSC COIL (BIAS)		
	Q 001	2SC1923	TRANSISTOR I/M		
	Q 007	2SC1923	TRANSISTOR I/M		
	Q 008	BA1A4P	DIGITAL TRANSI.		
	Q 009	BN1A4P	DIGITAL TRANSI.		
	Q 010	BN1A4P	DIGITAL TRANSI.		
	Q 011	BN1A4P	DIGITAL TRANSI.		
	Q 012	2SC2785	TRANSISTOR I/M		
	Q 013	2SC2785	TRANSISTOR I/M		
	Q 153	2SC2001(L,K)	TRANSISTOR I/M		
	Q 181	2SC2001(L,K)	TRANSISTOR		
	Q 191	2SC2001(L,K)	TRANSISTOR		
	Q 253	2SC2001(L,K)	TRANSISTOR I/M		
	Q 281	2SC2001(L,K)	TRANSISTOR		
	Q 291	2SC2001(L,K)	TRANSISTOR		
	Q 381	2SA1175	TRANSISTOR I/M		
	Q 382	BA1A4P	DIGITAL TRANSI.		
	Q 383	2SC2785	TRANSISTOR I/M		

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q 391	BA1A4P	DIGITAL TRANSI.		
	Q 901	2SB772(Q,P)	TRANSISTOR		
	Q 902	2SC2785	TRANSISTOR I/M		
	Q 903	2SC2785	TRANSISTOR I/M		
	Q 904	2SC2785	TRANSISTOR I/M		
	Q 911	2SA952(L,K)	TRANSISTOR I/M		
	Q 921	2SB1274(R,S)	TRANSISTOR		
	Q 922	2SC2785	TRANSISTOR I/M		
	Q 923	2SC2785	TRANSISTOR I/M		
	Q 931	2SB562(C)	TRANSISTOR		
	Q 932	2SC2785	TRANSISTOR I/M		
	Q 941	2SA952(L,K)	TRANSISTOR I/M		
	Q 991	BN1L4M	DIGITAL TRANSI.		
	QA121	2SC2785	TRANSISTOR I/M	HDUB EQ	
	QA122	2SC2785	TRANSISTOR I/M	REC MUTE	
	QA221	2SC2785	TRANSISTOR I/M	HDUB EQ	
	QA222	2SC2785	TRANSISTOR I/M	REC MUTE	
	QA321	BA1A4P	DIGITAL TRANSI.	ALC SW	
	QA341	2SC945L(P,Q)	TRANSISTOR		
	QA342	2SC2001(L,K)	TRANSISTOR I/M		
	QA343	2SC2785	TRANSISTOR I/M		
	QA344	2SC2785	TRANSISTOR I/M		
	QA345	2SC2785	TRANSISTOR I/M		
	QA347	BA1A4P	DIGITAL TRANSI.		
	QA351	BA1L4M	DIGITAL TRANSI.		
	QA352	2SC2785	TRANSISTOR I/M		
	QA361	2SA1175	TRANSISTOR I/M		
	QA362	BA1A4P	DIGITAL TRANSI.		
	R 001	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 002	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 003	QRD167J-4R7	C.RESISTOR	4.7 5% 1/6W	
	R 004	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 005	QRD161J-823	C.RESISTOR	82K 5% 1/6W	
	R 006	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 008	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 009	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 010	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 013	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 018	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 020	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 023	QRD161J-564	C.RESISTOR	560K 5% 1/6W	
	R 024	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	R 025	QRD161J-334	C.RESISTOR	330K 5% 1/6W	
	R 027	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	R 029	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 030	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 031	QRD161J-563	C.RESISTOR	56K 5% 1/6W	
	R 032	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 034	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 035	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 036	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 037	QRD161J-560	C.RESISTOR	56 5% 1/6W	
	R 040	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 041	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 042	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 043	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 044	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 047	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 048	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	R 049	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 052	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	R 053	QRD161J-471	C.RESISTOR	470 5% 1/6W	
	R 054	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 055	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 056	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 057	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 058	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 101	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	R 102	QRD161J-2R2	C.RESISTOR	2.2 5% 1/6W	
	R 103	QRD167J-121	C.RESISTOR	120 5% 1/6W	
	R 104	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 121	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 122	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 123	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	R 124	QRD161J-334	C.RESISTOR	330K 5% 1/6W	
	R 141	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 142	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 143	QRD161J-393	C.RESISTOR	39K 5% 1/6W	
	R 146	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 151	QRD161J-363	C.RESISTOR	36K 5% 1/6W	
	R 152	QRD161J-183	C.RESISTOR	18K 5% 1/6W	
	R 153	QRD161J-563	C.RESISTOR	56K 5% 1/6W	
	R 155	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	R 157	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 158	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 181	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 191	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 192	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 193	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 194	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 196	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 201	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	R 202	QRD161J-2R2	C.RESISTOR	2.2 5% 1/6W	
	R 203	QRD167J-121	C.RESISTOR	120 5% 1/6W	
	R 204	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 221	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 222	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 223	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	R 224	QRD161J-334	C.RESISTOR	330K 5% 1/6W	
	R 241	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 242	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 243	QRD161J-393	C.RESISTOR	39K 5% 1/6W	
	R 246	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 251	QRD161J-363	C.RESISTOR	36K 5% 1/6W	
	R 252	QRD161J-183	C.RESISTOR	18K 5% 1/6W	
	R 253	QRD161J-563	C.RESISTOR	56K 5% 1/6W	
	R 255	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	R 257	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 258	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 281	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 291	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 292	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 293	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 294	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 296	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 321	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	R 322	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 323	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 341	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 342	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 343	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	R 360	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 361	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 362	QRD161J-154	C.RESISTOR	150K 5% 1/6W	
	R 363	QRD161J-470	C.RESISTOR	47 5% 1/6W	
	R 364	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 365	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 366	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	R 383	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W	
	R 384	QRD161J-101	C.RESISTOR	100 5% 1/6W	
	R 385	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 386	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 387	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 388	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	R 391	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 392	QRD161J-181	C.RESISTOR	180 5% 1/6W	
	R 393	QRD161J-474	C.RESISTOR	470K 5% 1/6W	
	R 901	QRD161J-471	C.RESISTOR	470 5% 1/6W	
	R 902	QRD161J-564	C.RESISTOR	560K 5% 1/6W	
	R 903	QRD161J-471	C.RESISTOR	470 5% 1/6W	
	R 904	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	R 905	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 906	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	R 907	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 908	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 909	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	R 910	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	R 911	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	R 912	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	R 921	QRD161J-271	C.RESISTOR	270 5% 1/6W	
	R 923	QRD161J-471	C.RESISTOR	470 5% 1/6W	
	R 924	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 925	QRD161J-224	C.RESISTOR	220K 5% 1/6W	
	R 926	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 927	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W	
	R 928	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W	
	R 931	QRD161J-391	C.RESISTOR	390 5% 1/6W	
	R 932	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	R 933	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	R 934	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 941	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	R 944	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	R 991	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA103	QRD161J-560	C.RESISTOR	56 5% 1/6W	
	RA104	QRD161J-123	C.RESISTOR	12K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	RA105	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	RA106	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	RA107	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	RA108	QRD161J-183	C.RESISTOR	18K 5% 1/6W	
	RA111	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA121	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	RA122	QRD161J-823	C.RESISTOR	82K 5% 1/6W	
	RA123	QRD161J-681	C.RESISTOR	680 5% 1/6W	
	RA124	QRD161J-821	C.RESISTOR	820 5% 1/6W	
	RA125	QRD161J-560	C.RESISTOR	56 5% 1/6W	
	RA126	QRD161J-561	C.RESISTOR	560 5% 1/6W	
	RA127	QRD161J-820	C.RESISTOR	82 5% 1/6W	
	RA128	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA129	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA130	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA131	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	RA132	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	RA133	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA141	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	RA203	QRD161J-560	C.RESISTOR	56 5% 1/6W	
	RA204	QRD161J-123	C.RESISTOR	12K 5% 1/6W	
	RA205	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	RA206	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	RA207	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	RA208	QRD161J-183	C.RESISTOR	18K 5% 1/6W	
	RA211	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA221	QRD161J-273	C.RESISTOR	27K 5% 1/6W	
	RA222	QRD161J-823	C.RESISTOR	82K 5% 1/6W	
	RA223	QRD161J-681	C.RESISTOR	680 5% 1/6W	
	RA224	QRD161J-821	C.RESISTOR	820 5% 1/6W	
	RA225	QRD161J-560	C.RESISTOR	56 5% 1/6W	
	RA226	QRD161J-561	C.RESISTOR	560 5% 1/6W	
	RA227	QRD161J-820	C.RESISTOR	82 5% 1/6W	
	RA228	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA229	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA230	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W	
	RA231	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W	
	RA232	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	RA233	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA241	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W	
	RA301	QRD161J-331	C.RESISTOR	330 5% 1/6W	
	RA302	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	RA303	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	RA305	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RA306	QRD161J-104	C.RESISTOR	100K 5% 1/6W	
	RA307	QRD161J-333	C.RESISTOR	33K 5% 1/6W	
	RA315	QRD161J-221	C.RESISTOR	220 5% 1/6W	
	RA317	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	RA321	QRD167J-121	C.RESISTOR	120 5% 1/6W	
	RA322	QRD161J-475	C.RESISTOR	4.7M 5% 1/6W	
	RA323	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RA327	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RA328	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA341	QRD14CJ-470SX	UNF.C.RESISTOR	47 5% 1/4W	
	RA342	QRD161J-101	C.RESISTOR	100 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	RA343	QRD161J-3R9	C.RESISTOR	3.9 5% 1/6W	
	RA344	QRD161J-153	C.RESISTOR	15K 5% 1/6W	
	RA345	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RA346	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	
	RA347	QRD161J-123	C.RESISTOR	12K 5% 1/6W	
	RA348	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W	
	RA350	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W	
	RA351	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RA352	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RA353	QRD161J-394	C RESISTOR	390K 5% 1/6W	
	RA354	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RA361	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	
	RA363	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RE 3	QRD161J-473	C.RESISTOR	47K 5% 1/6W	
	RT 01	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	RT 03	QRD161J-223	C.RESISTOR	22K 5% 1/6W	
	RT 04	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RT 05	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RT 06	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	
	RT 07	QRD161J-103	C.RESISTOR	10K 5% 1/6W	
	T 001	VQT7F12-110	IFT COIL	FM IF	
	T 002	ECB1560-010	C.FILTER		
	TC 02	QAT3722-300ZM	T.CAPACITOR		
	TP 01	VMZ0015-002	POST PIN	TO ROD ANT	
	VRA41	QVZ3523-203AZ	V RESISTOR		
	VRA61	QVZ3523-102AZ	C RESISTOR		
	X 001	V472124-A0	CRYSTAL		

15. Illustration of Packing and Parts Listm

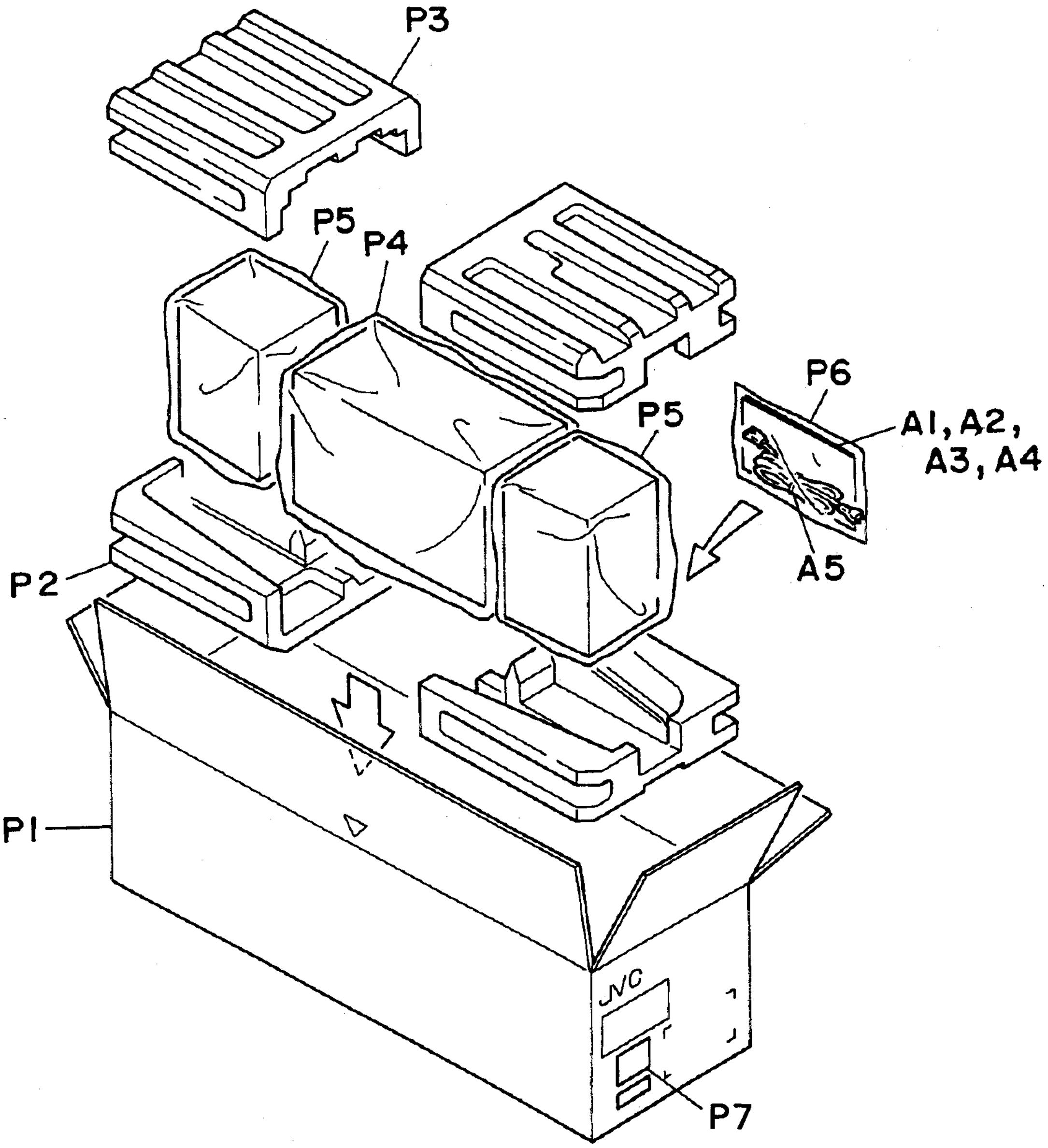


Fig. 15-1

Packing parts list

BLOCK NO. M5MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	FMPC7002-001	CARTON		1		
	P 2	FMPH1004-001	BOTTOM CUSHION	L&R	1		
	P 3	FMPH1003-001	UPPER CUSHION	L&R	1		
	P 4	E300196-031B	POLY BAG	FOR RECEIVER	1		
	P 5	VPE3020-018	POLY BAG	FOR SPEAKER	1		
	P 6	E300196-033B	ENVELOPE	FOR INSTRUCTION	1		
	P 7	**********	COMPUTER LABEL		2		

16. Accessories

BLOCK NO. M6MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	FMUN7002-611M	INSTRUCTIONS		1		
	A 2	BT-20047F	WARRANTY CARD		1	J	
		BT-20025L	WARRANTY CARD		1	C	
	A 3	BT-20071B	SERVICE NETWORK		1	C	
		BT-20137	SERVICE NETWORK		1	J	
	A 4	BT-20044G	SAFETY INST.		1	J	
⚠	A 5	QMP1350-183	POWER CORD		1		

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